

MAY 1990





Auto-Call is the Official Journal of the Foundation For Amateur Radio



the EEB Hamgram

HAM & SWL NEWSLETTER

Volume 190

Spring 1990

THE NEW EEB

We are excited about the NEW EEB. At long last we have larger showrooms (several of them), more warehouse (larger inventories), and space to grow. We have all this under one roof and ample parking.

Since we opened the doors at our new facility customer response to the *NEW* EEB has been positive and very complimentary.

Stop by and see the shiny new face of EEB and enjoy our new store.

THE HAMGRAM

Over the last 12 years we have mailed thousands of HAMGRAMs as promotions for special sales. They were mass mailed to nearly every ham in this area.

This HAMGRAM inaugurates our newsletter format. The HAMGRAM will be sent to all subscribers at no charge. Just write or phone EEB to be placed on our mailing list.

Our idea with the new HAMGRAM is to quickly inform our subscribers of special deals from our suppliers that you may never see in the magazines. You'll also see announcements of new products before they appear in the magazines and read about things months before they will be seen in QST, CQ, 73, or Ham Radio. Why? Because those big magazines have a nearly three month lead time for publication. The HAMGRAM is prepared locally and has a lead time of only a few days.

We also will list VEC exam schedules, ham class and club information, and even include short informative how-to articles.

Of course each issue will include special sales on demos, trade-ins, and more.

EEB GRAND OPENING A BIG SUCCESS





February 25th (Winterfest Day) was the Grand Opening of our new retail store.

Well over 1,000 customers passed through the doors at 323 Mill Street, creating a buying frenzy among the many store-wide specials.

We wish to express our appreciation to the following suppliers for assisting us in making our grand opening such a success.

ICOM

Jim Newcomb N7MBA and Bill Everett K7RIE displayed the new ICOM R1, R100, and R72A receivers



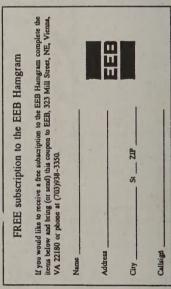
and answered many questions about the Icom amateur and SWL lines.

They also showed off their new and very special IC24AT dual band HT. This is sure a rig to watch for. It can do 2 meters and 440 Mhz --- and scan from airband to cellular.

CUSHCRAFT

Ed Hammond KB1DG showed all the details of their super selling R5 vertical antenna.





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AUTO-CALL

Official Journal of the Foundation for Amateur Radio

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Deadline for copy is the 5th of the month. All contributions are welcomed, but the editor does reserve the right to edit or reject any portion of any copy.

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AUTO-CALL has paid subscriptions of over 1500 and a total circulation of about 1800. Copies are sold at local stores and a number of Swap and Complimentary copies are mailed each month. The magazine is entered as third class non-profit matter at the post office at Arlington, VA.

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Subscriptions received after the 15th of the month will be started with the following month's issue.

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MEMBER CLUBS

Adams County Amateur Radio Society Alexandria Radio Club Amateur Radio Research and Development Corp. Anne Arundel Radio Club Antietam Radio Association, Inc. Arlington Amateur Radio Club Baltimore Amateur Radio Club Baltimore Radio Amateur Television Society Capital City Amateur Radio Society Capitol Hill Amateur Radio Society Chaverim of the Greater Washington Area, Inc. Columbia Amateur Radio Association Department of State Amateur Radio Club Fauquier Amateur Radio Club Frederick Amateur Radio Club Friendship Amateur Radio Club Goddard Amateur Radio Club Green Mountain Repeater Association Johns Hopkins University APL Amateur Radio Club Laurel Amateur Radio Club MADRAS Maryland Emergency Phone Net Maryland FM Association Maryland Mobileers Amateur Radio Club Metropolitan Communications Network Radio Club Metrovision Amateur TV Club Montgomery Amateur Radio Club Mount Vernon Amateur Radio Club National Capital DX Association Naval Research Laboratory Radio Club New Carrollton Amateur Radio Society Northern Virginia FM Association Northern Virginia Radio Club Ole Virginia Hams Amateur Radio Club Pentagon Amateur Radio Club Potomac Area VHF Society Potomac Valley Radio Club Prince Greorge's Wireless Association, Inc. Quarter Century Wireless Association, Inc.

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Southern Maryland Amateur Radio Club
Stafford Amateur Radio Assn
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Tri-MARC, The Middle Atlantic FM & Repeater Council
Vienna Wireless Society
Washington Adventist Amateur Radio Association
Washington Area Young Ladies' Amateur Radio Club
Washington Radio Club
Woodbridge Wireless, Inc.

EDITORIAL

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The Foundation for Amateur Radio
has elected new officers for 1990-1991.
The new President is Phil Russo, N3GGD
and new Secretary is Jo Seasely, KA3UZI.
There has been a bit of reshuffling of
Board members. Retiring President Bob
Moore, N3CKD is now a Vice President,
as is retiring Secretary Mary Morris,
N4TCI. Long time Corresponding Secre-
tary Irene Akers, W3RXJ has retired and
her duties will be assumed by Joe Seasley.
All of the other officers have continued
for another term.

Our sincere congratulations to all of these people on their election and our thanks to them for accepting the leadership responsibilities. There is much work involved in the routine administration of the Foundation and great demands in connection with the special activities such as the scholarship program, annual Gaithersburg Hamfest, etc. Get to know this team and give them your support.

Thanks

Thanks to all the people who have submitted material for the Auto-Call. We have received some fine input and you will see several of the items in this issue. More will be appearing in future issues.

Thanks to your input, Auto-Call is becoming a really fine little magazine and we think it is one of the best bargains on the market. This month we are again up to 64 pages! I like Tony Young's slogan: "Be a know it all - Read Auto-Call." And he is right. If you read Auto-Call you will have at least a quick once over on most of the important activities in Amateur Radio and great coverage of what is going on in the local area clubs and special activities.

What we need now is more subscribers and more commercial advertisers. We have a good market to offer - with over 1800 copies of Auto-Call going to the most active Amateurs in the area. Spread the word. And help us find more Display ads to help pay for the bigger and better magazine.

Editor, Ethel Smith - K4LMB

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Coming Events

1990

May 13	Carroll County Computer Fest and Hamboree. Carroll County. See flyer page 20
May 18-19 May 19-20	Atlantic Division Convention - Rochester, New York. See Flyer page 28 Roanoke Division League Planning Meeting, Asvhile, N.C. See flyer page 1
May 19	Mayland Mobileers Special Event actitity from WA3PJQ Aboard the submarine U.S.S. TORSK. To honor the submarine service.
May 19	Armed Forces Day. Pentgon ARC Special Event Activity
May 20	Wheeling Hamfest and Computer Fair, Wheeling, West Virginia
	See flyer page 27
May 23	Department of State Annual Banquet, Ft. Myer Officers Club. See page 48
May 27	Maryland FM Association Hamfest, Friendship, MD See flyer Page 14.
May 27 *	Roanoke, VA 30th RVARC Mayfest
June 3	Manassas Hamfest, Manassas, VA. See flyer Page 36
June 8-10	ARRL National Convention, Kansas City, Mo. See flyer
June 17 *	Frederick Hamfest, Frederick, MD
July 7 *	Jackson's Mill Hamfest/ State Radio Council, Jackson's Mill, W VA
July 21 *	Bluefield Hamfest, Bluefield, WV
July 29	BRATS HAMFEST, Timonium, MD (See Page 59)
Aug. 5 *	Winchester 40th Hamfest, Berryville, VA
Sept 9 *	Foundation For Amateur Radio Hamfest, Gaithersburg, Maryland
Sept 15-16	Virginia Beach Hamfest - Virginia Beach, Virginia
	ARRL Roanoke Division Convention.
	ANARC SWL Convention, Computer Exhibition
Sept 29 *	TARA Hamfest, Huntington, WV
Oct 14 *	CARA 13th Annual Hamfest, Howard County, MD Info: 997-5052
Oct 12-13	QCWA National Convention, Kansas City, Missouri.

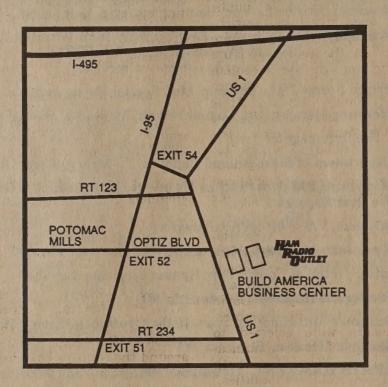
Please keep Auto-Call advised of important Coming Events. We are anxious to provide our readers with timely information and to help you avoid possible conflicts when scheduling activities.



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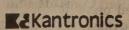
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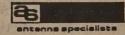






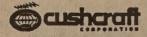






















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FCC HIGHLIGHTS

by Bill Grenfell W4GF

National **Telecommunications** and Information Administration (NTIA) which shares responsibility with the FCC for management of the radio spectrum, recently began a comprehensive policy review of the use and management of the radio frequency spectrum in the US." The ARRL commented "Just as public policy requires that there be public parks and other open space for nourishment of the human spirit, so must there 'open spaces' in the radio spectrum where the public can pursue personal, non-commercial ends. "This is the essence of the Amateur Radio Service." After commenting on a number related issues on frequency use and allocation the "...radio amateurs to" League advised ...urge that those spectrum management practices which result in an artificial scarcity of spectrum be revised replaced."

FCC's Advisory Committee for the World Administrative Radio Conference (WARC-92) includes FCC's Commissioner Sherrie Marshall as co-Chairperson and ARRL's Executive Vice President David Sumner as one of the 35 members. "Committee members were selected to represent a diversity of telecommunications interests and were drawn from both the business and academic communities." "The ARRL has filed its comments in response to an FCC inquiry in general docket 89-554. "...ARRL said it recognizes the significance of the inquiry and...stands ready to participate fully in the process leading to the US position at WARC-92."

"An FCC Notice of proposed Rule Making in PR Docket 90-100, released on March 7, proposes to relocate the Novice and Technician segment of the 80 meter band from 3700-3750 kHz to 3675-3725 kHz. The Commission believes that this will reduce interference to and from Canadian amateurs. FCC is asking for comments with respect to the level of interference in the current Novice and Technician segment and how the proposed frequency move would impact current amateur operations. "Amateurs may file

comments on or before June 15 1990, and reply comments on or before July 13.

"Responding to an ARRL proposal (RM-6512), FCC has relocated automatic beacon operation in the 2 meter and 70 cm amateur bands (PR Docket 89-65). "On 2 meters the band segment has changed from 144.05 - 144.06 MHz to 144.275 - 144.300 MHz and on 70 cm from 432.07 - 432.08 Mhz to 432.300 - 432.400 MHz. "ARRL also requested relocation of the 220 MHz Beacon subband from 220.05 - 220.06 MHz to 220.275 - 220.300 MHz. FCC denied this portion of the request.

"Although it continues to object to the way in which the FCC reallocated 220 -222 MHz from amateurs to commercial use, the American Red Cross (ARC) in Washington has asked for four or five channels from the reallocated band for its exclusive use. A basis for the request is that the Hurricane Hugo experience "dramatically revealed" the inability of the ARC to communicate in disasters using the current system, which is based on the single nationwide frequency of 47.42 MHz. "The FCC may believe they've made their 'final' decision in Docket 87-14 to reallocate 220 - 222 MHz - but amateurs around the country have kept up the fight by continuing to write letters to their representatives in Congress to complain of the FCC action. "More letters come in every week."

On Nov.13, 1989 The FCC issued a public notice requesting comments on an ARRL request for issuance of a declaratory ruling of federal preemption over state and local ordinances which regulate or prohibit the possession or installation in motor vehicles of radio receivers capable of reception of police, public safety communications. statues have been applied against licensed radio amateurs to permit the seizure of FCC authorized equipment used and intended for use by amateurs." Comments were due May 16 and replies May 31 at Rm 5322, 2025 M St. N.W., Washington, DC 20554.

FCC advises that even though the latest print of AMATEUR LICENSE APPLICATION 610 FORMs bear the "12/31/89" expiration date, DISREGARD THE DATE.

"The FCC has fined a West Taghkanic, New York ham \$1000 for operating an unlicensed radio station on 1000 kHz. "Acting on a complaint filed by the New York State Broadcasters Association, an engineer from the FCC's New York Field Office located the illegal station at the home of Frederick K. Stark, KA2LYZ. "The station was said to have been rebroadcasting the U.S.Armed Forces Radio Network while signing the call WNYS."

The N-prefixed Group 1x3 call sign blocks for the fourth and sixth call districts have nearly all been assigned. After N4ZZZ and N6ZZZ have been issued, FCC will begin assigning calls from the 2x3 call sign block.

THE LATEST CALLS ISSUED FOR THE STATESIDE, ALASKA AND HAWAII CALL AREAS WERE: AS OF 1 MAR 1990

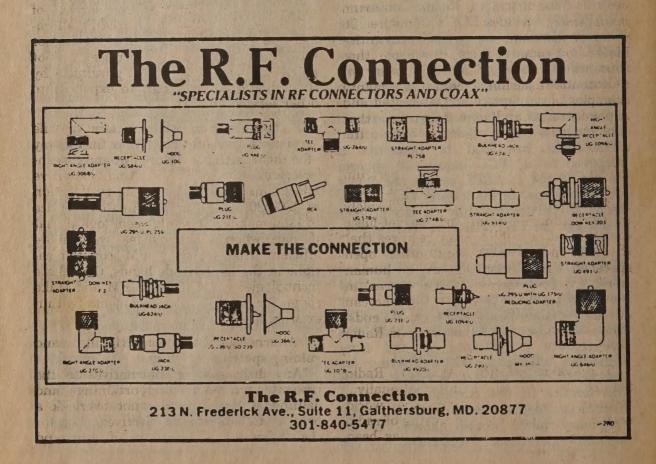
		GENERAL/	
EXTRA	ADVANCED	TECH.	NOVICE
WDIN	KC1TX	NIHJS	KAIVFZ
WW20	KE2SE	N2KJU	KB2JOW
NY3R	KD3RF	N3HWQ	KA3VVM
AB4TW	KN4EZ	N4YHA	KC40VY
AA50S	KI5DF	N5QBM	KB5LUZ
AA6UH	KK6HJ	N6YBR	KC6JCV
AA7DO	KG7AX	N70IZ	KB7JVU
WZ8W	KF8ES	N8LXN	KB8JFB
WO9Z	KE9VF	N9JIN	KB9EDT
WZØY	KFØIM	NØLPK	KBØGAM
HAWAII	AH6KH*	NH6WB	WH6CGU
ALASKA	AL7LX*	NL7TN	WL7BXE

* EXTRA CLASS ALSO ASSIGNED FROM THIS GROUP

(Material marked by "quotes" was obtained from various publications, including the ARRL Letter, W5YI Report, WESTLINK Report, and Current FCC Rules.),

Gf

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American Radio Relay League Report

By John Swafford -- W4HU

This ARRL Report provides a brief summary of information published in the ARRL LETTER and other reports. The LETTER is published biweekly and provides timely news of interest to active, organizationally minded Radio Amateurs.

Subscription to the ARRL LETTER is available to any ARRL member.

ARRL COMMENTS IN NTIA SPECTRUM MANAGEMENT INQUIRY. The National Telecommunications and Information Administration (NTIA) which responsibility with the FCC for management of the radio spectrum, recently began a comprehensive policy review of the use and management of the radio frequency spectrum in the US. The NTIA Notice of Inquiry (NOI) was published in the Federal Register on December 8, 1989. The NOI invited comments from the public on a wide-ranging series of ques-(See ARRL Letter Volume 8, Number 25.)

On February 23, 1990 ARRL Counsel Chris Imlay, N3AKD filed comments on behalf of the League. In its opening comments ARRL said "The League has been a participant in the spectrum management process for its entire 76 years of existence -- virtually the entire history of radio regulation. From that time until the present, the history of radiocommunication (contains many) examples of concepts being developed and implemented by Radio Amateurs that subsequently were adopted by the commercial sector.

"While improvements in spectrum management policies are needed... the public interest cannot be measured solely in the economic terms of market-place forces. Just as public policy requires that there be public parks and other open space for the nourishment of the human spirit, so must there be 'open spaces' in the radio spectrum where the public can pursue personal, non-commercial ends. This is the essence of the Amateur Radio Service.

"The value of the Amateur Radio Service is recognized internationally... virtually every country in the world makes provisions for the licensing of radio Amateurs... A close correlation has been noted between the extent to which a government encourages Amateur Radio, and the level of technical development achieved in that country.

"On behalf of present and future licensees in the Amateur Radio Service, the League respectfully urges that considerable weight be given to the protection of this access in the present proceeding."

The League commented on certain of the questions posed in NTIA's Notice of Inquiry including:

Encouragement of spectrum-efficient

technology:

"The greatest impediment to the introduction of new technology...is the lack of an incentive for more spectrum-efficient techniques to be implemented within each existing service... the opportunity to seek new allocations simply relieves services of the obligation to use their existing allocations to full efficiency. If a service, or those who regulate the service, cannot efficiently use a block, it is puzzling why they should be permitted to expand into other services' blocks.

"A case in point is the land mobile service's apparent inability to find a way of incorporating 'narrowband technologies' into their existing extensive allocations instead of seeking reallocation of 220-220 MHz from the Amateur service to land mobile. It would seem logical that if narrowband technologies were more efficient than existing FM communications in the land mobile bands, then these technologies could displace FM and make room for additional assignments within existing land mobile bands."

Alternatives to apportioning and

valuing spectrum"

"Any discussion of alternatives to the present system of apportioning and valuing spectrum should not overlook a primary Congressional objective:
the promotion of safety of life and

property through the use of wire and radio communications (Section 1, The Communications Act of 1934). The Amateur Radio Service exists as a non-commercial, volunteer-based system that provides critical life-and property-saving communication services at no cost to the public, private or government sectors.

"Congressional support for the Amateur Radio Service was expressed in Public Law 100-594... this law states the sense of Congress that 'it strongly encourages and supports the Amateur Radio Service and its emergency communications efforts; and Government agencies shall take into account the valuable contributions made by Amateur Radio operators when considering actions affecting the Amateur Radio Service.'

"In countless well-documented cases, Amateur Radio operators have stepped in to provide continuity of communications for government and non-government relief agents, as well as to the public, in disasters when normal communications links have been disrupted or completely severed. In such cases, the value of Amateur Radio is enormous relative to the amount of its allocated spectrum.

"The Amateur Radio Service, through participation by thousands of dedicated volunteers, provides a resource that could never be matched by commercial services. The very nature of the service requires that Amateur Radio operators be prohibited from accepting compensation for their communications services; however, means they cannot afford to compete, head-to-head, with commercial interests that seek spectrum in order to provide services for monetary gain. marketplace approach to spectrum management would work to the serious detriment of Radio Amateurs, and thus to the public interest.

"Thus, any alternatives to apportioning and valuing spectrum must take into consideration the following mandates:

1. Uses of radio that promote the safety of life and protection of property are entitled to special consideration.

2. Networks built and operated by volunteers that provide necessary services should be valued according to what it would cost to duplicate the services.

3. The value to the public of any particular communications service is not necessarily commensurate with the financial resources at its disposal; it is not in the public interest to apportion spectrum based solely or even largely on ability to pay.

4. The public is entitled to access to its

own spectrum."

The League also commented on these issues:

- * FCC allocation and assignment processes.
- * FCC reliance on private user groups for specific spectrum management functions.
- * Domestic coordination.
- * Strengths and weaknesses of existing domestic coordination process.
- * US preparation for ITU conferences.
- * The strengths and weaknesses of the block allocation system.
- * Possible amendment of definitions of radio services.
- * Increasing use of spectrum by nonlicensed (Part 15) devices.
- * Revenue enhancement proposals.
- * Measuring spectrum use; private monitoring.

ARRL concluded by saying, "As citizens who stand to be significantly affected by the policies adopted as a result of this proceeding, both as consumers of telecommunications services and as volunteer suppliers of such services, Radio Amateurs urge that those spectrum management practices which result in an artificial scarcity of spectrum be revised or replaced.

"However, in implementing new practices that encourage greater efficiency in the use of the radio spectrum, it must be recognized that they will have limited applicability to the Amateur Radio Service. Attempts to force-fit the Amateur Radio Service into a new system designed to encourage innovative uses of the spectrum will lead to the opposite result in one of the most innovative radio services now in existence."

NOMINATIONS SOUGHT FOR THE MAXIM MEMORIAL AWARD. Now is the time to find that special young Amateur who is setting a fine example of public service, education and goodwill through his or her Amateur Radio efforts. The Hiram Percy Maxim Memorial Award is given annually to the licensed radio Amateur under the age of 21 whose accomplishments and contributions are the most exemplary nature within the framework of Amateur Radio activities, including, but not limited to:

- * Participation or leadership in organizational affairs at the local or national level.
- * Technical achievement.
- * Operating record.
- * Recruitment and training of new Amateurs.
- * Public relations activities.

In keeping with the tradition of the award when it was first established in 1936, formal nominations are made by ARRL Section Managers. Suggestions and supporting information, including the endorsement of ARRL affiliated clubs and elected or appointed League officials, should be submitted with the nomination. An award panel will review the nominations and select the winner. The winner will receive a \$1000 cash award, an engraved plaque, and travel and accommodation expenses to attend an ARRL convention where the formal presentation will be made.

CODELESS LICENSE - A REVIEW On July 23, 1989, the ARRL Board of Directors voted to petition the FCC to create a code-free class of Amateur Radio license. On February 8, 1990, the FCC announced a Notice of Proposed Rule Making (NPRM) for a code-free license. The NPRM is a conglomeration of various aspects taken from the many proposals the FCC received. There are some significant differences in what ARRL asked for, and what the FCC proposed.

Note that the FCC proposes to cease issuing Novice and Technician Class licenses, leaving four classes in the structure--Extra, Advanced, General and

Communicator. (Existing Novices and Technicians would be able to keep all of their privileges and renew their licenses indefinitely, but no new licenses of these classes would be issued.)

David Sumner, K1ZZ, ARRL Executive Vice President, says:

While the League will not have an official position on the FCC proposal until adopted by the Executive Committee or the Board, it is fair to say that we have long placed great importance on the retention of the Novice license as a means of entry into Amateur Radio. It would not be overstating the past and present League position to say that retention of the Novice license is deemed abso-Similarly, we have lutely essential. attached considerable importance to the FCC's continuing to keep records of the privileges earned by its licenses.

While the present licensing structure, entry into the hobby is relatively simple at test on basic electronics, operating procedures and rules, and a 5 WPM code test. ARRL prefers to keep this avenue open and to add another: a more difficult theory exam and no code exam, with upgrading to Technician accomplished through passing a code exam. The FCC's proposal does not allow a choice.

You have ample opportunity to study this proposal and let your ARRL Directors know how you feel about it. The Directors will study everyone's comments and formulate a response to the FCC's NPRM at the July ARRL board meeting. The FCC accepts comments from interested parties through August 6, with reply comments due by September 7. The complete text to the NPRM will be printed in April QST.

"NORTH POLE 90" EXPEDITION UNDERWAY. A joint UK/USSR expedition is underway with the two British members of the team attempting to reach the north Pole on foot. The expedition "ice team" consists of Dr Mike Stroud and Sir Randolph Fiennes. Their progress will be monitored from 2 base camps, one located toward the end of the expedition on the moving Arctic Ocean ice at approx-

imately 86 degrees North Latitude, and the other on Sredniy Island at the tip of the Soviet Union.

Two special event calls will be used. GB4MSS at Sredniy base camp and GB4ICE at the forward base camp on the ice. The main base station GB4MSS will be active during March with GB4ICE signing on in April. Both stations will be active on most HF frequencies. GB4MSS will also be active on OSCAR 10, OSCAR 13, RS10 and RS11. In addition, GB4MSS will upload weather and other information on the expedition to the Digital Communications experiment (DCE) on board UoSAT 2 (OSCAR 11). This information will then be made available on packet bulletin boards, worldwide.

Special QSL cards are available from the expedition's QSL manager Ian Crockford, GM1AUZ.

NEW ARRL PUBLICATION AVAILABLE. Night Signals, an action-packed thriller written in the tradition of the Walker Tompkins, K6ATX, novels, is now available from ARRL. Written by Cynthia Wall, KA7ITT, Night Signals features Kim, a teenage YL Amateur Radio operator, and Marc, and Oregon State University student who meet on the air while Marc is hiking in the Mt. Jefferson Wilderness Area. This 168-page action-packed paperback is available from your local dealer or from ARRL HQ for \$5.00 plus \$2.50 shipping and handling (\$3.50 UPS). Order your copy today.

GLENDALE ARIZONA CITY COUNCIL WORKS WITH PRB-1 TO AMEND TOWER ORDINANCE. Glendale Arizona's City Council and Mayor voted unanimously, following a public hearing held February 27, to amend the city's zoning ordinance to define Amateur Radio towers so as to exempt them from an earlier restriction of 30 feet in residentially zoned areas.

City staff in Glendale, after a process of nearly one year, completed legal and HF propagation studies concluding that 75 feet is the minimum necessary to provide for "reasonable accommodation" as mandated in PRB-1. In their written report to the City's Zoning and Planning Commission and later to the City Council, the

staff was supportive of Amateur Radio in general, citing its value to the community and to the nation.

The report further acknowledges the zoning ordinance's previous failure to meet the requirements of PRB-1 and stresses the necessity for the additional height of tower installations to allow for more efficient long distance HF communications. In both their written report and in public hearing presentations, the city staff proved themselves to be strong advocates of Amateur Radio.

Those involved in the project were Phoenix attorney Neil Wake, KV7O, various members of the West Valley Amateur Radio Club, and Dr John Fahrendorf, WA7CYB, and Frank R. Smith, KF7PO, long-time residents of Glendale who both serve on municipal commissions in that city.

ENROLL NOW IN ARRL "ALL-RISK" INSURANCE PROGRAM. A special enrollment period for ARRL members will be underway during April for the ARRL "All-Risk" Ham Radio Equipment Insurance Program.

Covered equipment and accessories are protected from loss due to theft or damage caused by natural calamities such as fire, rain or wind. Coverage includes equipment at home, in your car and at a Field Day or hamfest site. New equipment purchased during the policy year valued up to \$1000 is fully covered at no additional cost until the next policy renewal. This comprehensive insurance program can be purchased for a year for \$1.25 per \$100 of replacement cost value, plus a \$5 yearly administration fee. A \$20 minimum premium is required.

Complete details about the coverage provided by the ARRL "All-Risk" Ham Radio Equipment Insurance Program is being sent to League members with an application form. To enroll, complete the application and mail it with your first annual premium check to the ARRL Insurance Administrator: Albert H. Wohlers & Co., ARRL Group Insurance Plans, 1440 N. Northwest Highway, Park Ridge, Illinois, 60068-1400.

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ROANOKE DIVISION LPM 90

LPM 90 is an excellent opportunity for you and your club to play an active role in planning future activities of your ARRL through its Director, Vice Director and other League Officials. Steve Ewald, WA4CMS, Assistant Public Service Manager, ARRL Headquarters will be in attendance. Take part in the planning for Amateur Radio into the 90's.

This years LPM will be held at the Radisson Hotel Asheville located in downtown Asheville at One Thomas Wolfe Plaza, one block from I-240. To receive the special room rate of \$64.00,

please mention ARRL LPM when making reservations.

Are you interested in the future of Amateur Radio? Are you interested in ARRL activities and programs? Are you interested in taking part in the discussions and planning that will affect Amateur Radio and the direction ARRL will take in the future?

If your answer to the above is "YES", you will want to attend the Roanoke Pivision League Planning Meeting - LPM 90. The purpose of LPM 90 is to offer League members and club representatives an opportunity to meet and talk with the elected and appointed officials of

ROANOKE DIVISION LPM 90 May 19-20 SPONSORED BY

John C. Kanode, N4MM - Director
James G. Walker, WD4HLZ - Vice Director
HOSTED BY

Western Carolina Amateur Radio Society
Asheville, North Carolina
LOCATION
Radisson Hotel Asheville
Asheville, NC 28801

704-252-8211

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the Roanoke Division and to participate in forums to develop programs and ideas for the benefit of Amateur Radio, the ARRL and the Roanoke Division.

Clubs are urged to send designated representatives to the meeting and all members of the American Radio Relay League in the Roanoke Division are encouraged to attend. Participation from neighboring Divisions is also invited.

EVERYONE IS WELCOME

Meeting Starts Saturday, May 19 at 1:00 PM
Meeting Concludes Sunday, May 20 at 1:00 PM
You will not want to miss this important event in the interest of Amateur Radio.

	LPM 90 REGISTRATION	
Name		Call
Address		
City	State	Zip
Mail Registration to:		
1 Lake Shore Drive Asheville, NC 28804	A4HWT Registration Only Registration and Banquet Enclosed is my check in the amount n reservations directly with the Radisson	@ 20.00 =

THE MARYLAND FM ASSOCIATION, INC. PROUDLY PRESENTS ITS ANNUAL

MEMORIAL DAY HAMFEST ON SUNDAY MAY 27, 1990

AT THE HOWARD COUNTY FAIRGROUNDS RT. #144, WEST FRIENDSHIP, MARYLAND

TIME: 8 a.m. until 3 p.m. -- premises MUST be cleared by 5 p.m.

TALK-IN on WA3DZD/Repeater (146.16/146.76, 223.16/224.76, and 449.0/444.0)

Plenty of good food and drink will be available.

COMMERCIAL DISPLAYS

AMPLE PARKING

DONATION: \$4
Tailgating: \$3

Table rentals (inside):
Paid in advance -- \$10

At the Hamfest -- \$15 (if available)

Only PAID table reservations accepted. If you haven't paid, you don't have reservations.

Howard Co.
Feirgrounds

Frederick Rd.

Fairgrounds Rd.

Figure 144 (1mile)

For reservations and information, write to:
Melvin Seyle (WA3KZR)
15809 Pointer Ridge Drive
Bowie, MD 20716
301-249-6147

Make checks payable to MFMA, Inc.

Amateur License Exam Reservations will be by SASE only! Steve Silberman (K3RMX) P.O. Box 592 Finksburg, MD 21048

All proceeds will be used for improvements to the Club's WA3DZD repeater system.

Commercial vendors must have proper tax/license certificates available.

All items offered for sale must be Amateur Radio related.

FOUNDATION FOR AMATEUR RADIO

Volunteer Examiner Cooperative

Nancy Draheim - NK4U 3513 Old Post Road, Fairfax, VA 22030 (703) 691-0078

SCHEDULE OF EXAMINATIONS 1990

IMPORTANT NOTE: If you now have a Technician class license which was acquired prior to March 21, 1987, have a copy of it available when you decide to upgrade.

EXAMS

Apr. 28	Laurel ARC (Laurel, MD) (Laurel VEC) Contact: John Creel, WB3GXW (301) 572-5124
May 5	University of Maryland ARC (College Park MD) (W5YI VEC) Walk-in Contact: Scott Rosenfeld N3FI (301) 963-4008
	John Tyler Community College (Richmond, VA) (W5YI VEC) Walk-in Contact: Albert Bailey, N4RPI (804) 233-6461 or Phil Giella, KC4DSF (804) 561-3020
	Portsmouth ARC (Portsmouth, VA) ARRL VEC) Contact: Art Thiemens, AA4AT (804) 484-2857
	Middletown VE Team (Middletown, VA) (ARRL VEC) Contact: Walt Quitter, NC4B (7093) 869-5241
May 12	Maryland Mobileer ARC (Laurel VEC) Preregistration requested Contact: Nancy or Deal Alley, NT3Z/NS3V (301) 761-7115
	Massanutten ARA (Harrisonburg, VA) (ARRL VEC) Contact: Wayne Miller (703) 434-4424
	Woodbridge Wireless Society (Woodbridge, VA) (ARRL VEC) Walk-in Contact: Jim Neff, WG4M (703) 680-6217
	Frederick Amateur Radio Club (Frederick, MD) (ARRL VEC) Contact: Rick Ogden (301) 663-5177
May 19	Hampton Roads Radio Assn. (Hampton, VA) (W5YI VEC)

Richmond ARC (Richmond, VA) (ARRL VEC) Preregistration requested

Contact: Bill Runyon, N4BDH (804) 487-8611

Contact: Ron Bolton, WU4G (804) 798-5191

Contact: John Creel, WB3GXW (301) 572-5124

Laurel ARC (Laurel, MD) (Laurel VEC)

May 26

Volunteer Examiner Cooperative - Continued

June 2 John Tyler Community College (Richmond, VA) (W5YI VEC) Walk-in Contact: Albert Bailey, N4RPI (804) 233-6461 or Phil Giella, KC4DSF (804) 561-3020

Virginia Beach ARC (Virginia Beach, VA) (ARRL VEC) Contact: Tom Weikel, KA4UNC (804) 340-7697

- June 16 Ole Virginia Hams (Manassas, VA) (ARRL VEC) Walk-in Contact: Harry Vorhauer, W4PVA (703) 368-6050
- June 23 Laurel ARC (Laurel, MD) (Laurel VEC) Contact: John Creel, WB3GXW (301) 572-5124
- July 7 John Tyler Community College (Richmond, VA) (W5YI VEC) Walk-in Contact: Albert Bailey, N4RPI (804) 233-6461 or Phil Giella, KC4DSF (804) 561-3020

GWU/Dept of State (Washington, DC) (ARRL VEC) Walk-in Contact: Derrill Rohlfs, W3WOX (301) 423-0179

July 14 PROS (Salisbury, MD) (Laurel VEC) Walk-in Contact: John Rupprecht, K3NOQ (301) 749-7444

> Chesapeake DX Assn. (Chesapeake, VA) (W5YI VEC) Contact: Bill Verebely, KC4YX (804) 424-4764

July 22 Antietam Radio Assn ARC (Hagerstown, MD) (ARRL VEC) Contact: Ken Picone, KC3TT (301) 824-3519

While most examinations are offered on a walk-in basis, pre-registration is desirable in all cases.

Certificates of successful completion for theory tests are not always accepted. Check with the contact person for the examination you wish to take.

If you are upgrading from Technician class license acquired prior to March 21, 1987 a copy of your license may be required as proof that you are grandfathered for Element 3B (General theory)

NOTE: All examinations require that you submit: Copy of your current Amateur Radio license (bring original) Completed FCC Form 610.

Check for appropriate examination fee.*

Maximum fee has been raised to \$4.95.

Fees of individual VEC may vary.

ARRL Exam fee is \$4.95

W5YI Exam fee is \$4.95

Laurel Exams are still free.

Mountain VEC Novice Exams free

All other Mountain VEC Exams \$2.00

This schedule of examinations appears each month in Auto-Call Magazine Sponsored by the Foundation for Amateur Radio

Training Classes

Robert Armstrong, WA4SQL 44 South French Street, Alexandria, VA 22304 (703) 751-2294

Training Classes, all grades through Extra. Starting March 26, Vienna, VA. Sponsored by the Vienna Wireless Society. Meets every Monday night at 7:30 p.m. at the Vienna Community Center and will run for 10 weeks. Classes are free and open to anyone. For further information contact Paul Wilkins, AB4CY (703) 560-2779

Radio theory training classes. Warrenton, VA. Sponsored by Fauquier Amateur Radio Club. Will begin the third week in September.

GENERAL INFORMATION

Club

Alexandria Radio Club

Anne Arundel

Antietam Radio Assn.

Arlington ARC Baltimore ARC

BRATS

Chaverim, Inc.

Fauguier ARC

Frederick ARC Laurel ARC

MADRAS

Montgomery ARC

Mount Vernon ARC NASA/Goddard ARC

Pentagon ARC

Rock Creek ARA

Shenandoah Valley ARC

Southern Maryland ARC

Sterling Park **Tri County ARC**

Vienna Wireless

Washington Adventists

Woodbridge Wireless

Contact

Harry Jones - N4CWP (703) 521-4624

Tony Young - WA3YLO (301) 262-1917

Ken Picone - KC3TT (301) 824-3519 after 5:00 p.m.

Fred Bardsley - WD4DHW (703) 533-0372

Phone 1-800-HAM TALK

Bill Self (301) 669-0149

Bob Teitel - W3IDT (301) 654-3484

Bill Mills - KC5PF (703) 937-4090 (H), 818-3955 (O)

Steve Bauman - W3FOA (301) 662-4552

Frank Treadwell - K3LDE (301) 498-2213

Larry Ziecheck - N3GKZ (301) 530-8646

Ken Nichols - KA3KGL (301) 977-5405 John Forrest - WZ4A (703) 971-3905

Vikki Gigante -KA3PVS (301) 249-2609

David Boyd - K9MX (202) 697-0630

Walt Ramsey - AK3B (301) 949-3954

Guy Black - W4PSJ (703) 722-4952 Vic Curtis - WA3YUV (301) 888-1388

Art Nevins - WA4NTP (703) 437-9382

Al Sines - WA3QGA, Box 710, College Park 20740

Paul Wilkins - AB4CY (703) 560-2779

Henry Miller - W3BWN (301) 474-7376

Lovd Davis - K8EI (703) 360-0248

Please keep the Training Chairman advised of any changes in the names and telephone numbers of the contacts for club training programs. Please list training programs far enough in advance for effective publicity. Now even better - 1-800-447-7489

Been all over the world looking for a ham dealer who really cares?



Tired of being left out on a limb after your purchase?

Shocked at the treatment you've received?





Come visit the dealer who really cares about you.

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Attend our monthly mini-fest.

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Laurel, Maryland - 20707

Baltimore area telephones ! -8307 (881) 300-1200-2400 Baed Open Mon-Fri 10AM-8PM / Set 9AM-5PM

From the B/W parkway, take 198 rest 3 lights and turn right at the Acura dealer. We are at the end of Laureldale drive.

- Fully equipped service shop Free monthly newsletter
- Public Technical Library
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- Ham exams every month
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- Monthly free Mini-fests
- Priority repair plan
- On-Air demos set-up

Now, direct dial Washington and

- Special events monthly
- Computer BBS 24 Hrs/day
- Used/Consignment sales

The Foundation For Amateur Radio



AMATEUR RADIO NEWS RELEASE

ANNOUNCING 1990 SCHOLARSHIP AWARDS

THE FOUNDATION FOR AMATEUR RADIO, INC., a non-profit organization with head-quarters in Washington, D.C., plans to award thirty-three (33) scholarships for the academic year 1990 - 1991 to assist licensed Radio Amateurs. The Foundation, composed of fifty local area Amateur Radio Clubs, fully funds five of these scholarships with the income from grants and its annual Hamfest. It administers, without cost to the donors, seven (7) scholarships for the Quarter Century Wireless Association, three (3) each for the Baltimore, (MD) Amateur Radio Club, the Radio Club of America, and the West Allis Radio Club of Milwaukee, (WI) and two (2) each for the Dade (FL) Radio Club, the Amateur Radio News Service, and the 10-10 International Net. It also administers one (1) each for the Richard G. Chichester Memorial, the Young Ladies' Radio League, the Columbia (MD) Amateur Radio Association, the Frederick (MD) Amateur Radio Club, the Vienna (VA) Wireless Society, the Goddard Amateur Radio Club and the Kevin B. Perdue Memorial.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. Some of the scholarships require the holding of at least an FCC GENERAL Class license or equivalent. The awards range from \$500 to \$2000 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs.

Additional information and an application form can be requested by letter or QSL card, postmarked prior to May 31, 1990 from:

FAR Scholarships 6903 Rhode Island Avenue College Park, MD 20740



The Foundation for Amateur Radio, Inc. (FAR) is a federation of over 50 Amateur Radio clubs in the greater Washington, DC area. Meetings of the representative Board of Directors are held on the second Wednesday of each month at the Columbia Union College, Science Building, in Takoma Park, MD. Visitors are always welcome. Membership is open to any qualifying Amateur Radio club.

Incorporated in the District of Columbia, FAR is an exempt organization under Section 501(c)(3) of the Internal Revenue Code of 1954. It is devoted exclusively to promoting the interests of Amateur Radio and those scientific, literary and educational pursuits that advance the purpose of the Amateur Radio Service.

The Summit Amateur Radio Association

Presents

THE 1990 CARROLL COUNTY COMPUTER FEST AND HAMBOREE

Sunday, May 13, 1990

at the Carroll County Agricultural Center, Smith Ave., Westminster, Maryland

Admission

Tailgating • \$5.00/Tables (w/AC - \$8.00 wo/AC - \$7.00) XYL's and Kids FREE

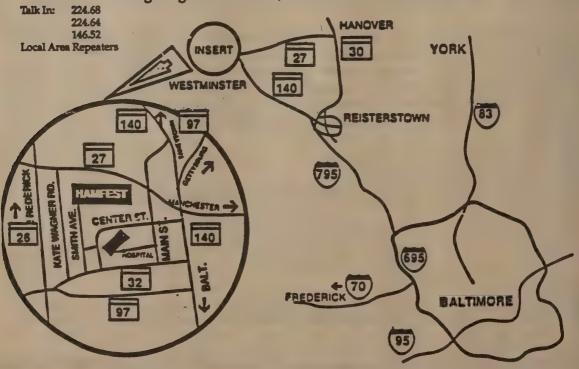
Donations: \$4.00

★ 7000 Square feet of inside table space Call for Information:

KS3L Al Parker 301-747-2076 or N3DRB Tim West 301-992-7745 ★ Large tailgate area Write for Information: S.A.R.A. P.O. Box 341

Randallstown, MD 21133

Tailgating Starts at 6 am, General Admission at 8:00 am





PUBLIC SERVICE REPORT

Hank Black - N3ESR

Material for the PUBLIC SERVICE REPORT can be left on the N4QQ PBBS (145.03,.05 or via DCA3) addressed to N3ESR, WA3ZNW PBBS on 145.09, called over the telephone by modem on arrangement or mailed to Public Service Report, 105 North Van Buren St., Rockville, Maryland 20850-1860.

Deadline for receipt of material is the third of the month.

A Guest Editorial

Robert W. Ageton, K4ADE

PROPOSED FORMATION OF JUMP TEAMS

The article "Hugo The Horrible" in the February issue of QST indicated a need to determine interest in Amateur Radio Clubs in the formation of possible "Jump Teams." The concept is not new and has been reported before in QST. Message handling is important and two generally accepted requirements are (1) reliability and (2) accuracy. Modern digital techniques might provide the modes to meet these criteria.

Is there an interest in clubs forming "Jump Teams" that would be volunteers for service at disasters nationally and internationally?

If there is an interest, what thoughts do the clubs have on the various aspects of teams and equipment?

Responses reported by clubs should include:
Club Name
Club Officer/Contact Person

Home BBS

Response from individuals is also welcome.

Please address responses to K4ADE @ WA3TAI

2504 N Kensington Street
Arlington, VA 22207

PUBLIC SERVICE CALENDAR

May - National Capital ARES Council Meeting

Contact Ken Williams, N3AQG (202) 363-8364

for time and place

May 9 Bethesda Day Parade

Contact Hank Black, N3ESR

List your public service events with the PS Calendar. It helps with planning and gives others the opportunity to participate in area events. Deadline is the 3rd of month.

SRAM-017

(Soviet Radio Amateur Movement)

Dexter Anderson, W4KM

[Rough, summary translations from Soviet Amateur Press]
[Comments by translator are in square brackets]

[from January 1990 issue of RADIO magazine]

[ARTICLE ON NEW AMATEUR SATELLITES] [Untitled]

Shown on the cover is a 1990 satellite -- a satellite in the navigational Doppler series with the "Tsidada" ["Cicada"] system. When launched, amateur repeaters RS-12 and RS-13, installed on board, will begin to operate.

The RS-12 and RS-13 are "brothers" of the RS-10 and RS-11 that have been in space several years. Their BRTK-10s [bortovyye radiotekhnicheskiye kompleksy, on-board radioequipment systems, literally on-board radiotechnical complexes] are just slightly modernized and for this reason are called BRTK - 10 M. They were made by the Volunteer Construction Bureau Attached to the Museum of the History of Cosmonautics Named After K. E. Tsiolkovskiy, under the direction of Aleksandr Pavlovich Papkov, UA3XBU. Plans are to place the satellite in a circular orbit of approximately 1000 km above the Earth, with an inclination angle of 83° and a rotation period of 105 minutes. The maximum output power of its repeaters will be about 8 watts. The repeaters are designed for operation on several bands, offset with respect to those used by RS-10 and RS-11. The repeater will permit simultaneous operation in Modes A (from Earth on 144 MHz, to Earth on 28 MHz), K (21 and 28 MHz), T (21 and 144 MHz), KA (from Earth on 21 and 144 MHz). In these same modes, it will be possible to receive beacon signals and conduct QSOs with on-board robots.

"THE EARTH IN A SENSE COMES TO LIFE ..."
by Boris Grigor'yevich Stepanov, UW3AX
Deputy Editor-in-Chief, "Radio"
Editor of NLD ["na lyubitel'skikh diapazonakh" - "On the Amateur Bands"] column in the newspaper "Sovetskiy patriot"]

[from introduction by UW3AX]

The success of "Operation U-MIR" is due in large measure to Sergey Samburov of Kaluga, formerly a radio amateur and great-grandson of K. E. Tsiolkovskiy. What did things look like aboard the "Mir" complex? A meeting is described with Pilot-Cosmonaut of the USSR Musa Khiramanovich Manarov, U2MIR, who shares his impressions of almost a month and a half of operation on the amateur airwaves.

[from "Q's and A's"]

Q: Let's go back to early last year, when the crew of the orbiting complex "Mir" received a letter from "Radio" magazine suggesting going on the air...

A: Let's go back several months earlier. Before the flight, representatives of the psychological support group wanted to know which periodicals I would like to receive in space. "Radio" was the only magazine I mentioned. But there was no "Radio" in the first batch of mail delivered. I made a fuss and it turned out they had forgotten my request. So with the next delivery we received several issues of "Radio." Up to then the editors of "Radio" had been an abstraction, but at that point they became a living collective. Not just magazines, but a letter came with kind words for our crew!

Q: And the suggestion to operate on the amateur airwaves?

A: Yes. At first we were somewhat skeptical, having in mind the complicated professional communication systems, whereas what was being discussed here was something small, simple, amateur. The experience with the "Okean" ["Ocean"] broadcasting receiver helped put us in the mood. It had been sent at our request, but nothing was audible except whistles and crackling sounds! We decided to try a homemade external antenna (before the ultrashortwave antenna was sent), which we soldered together out of several pieces of wire to be installed during our excursion in open space. But during the first excursion there wasn't enough time, and later your antenna arrived.

Q: I know you had to work on it -- we didn't take everything into account.

A: We added a loop to secure it. Otherwise we might be chasing it all over the universe! On the end of the antenna we fastened a flag of the USSR, removed from one of the suits and signed, on the back, "U1MIR, "U2MIR," and "U3MIR." I must say Mission Control didn't want to include installation of the antenna in the program for the regularly-scheduled excursion in open space. But we kept asking Mission Control and got our way: If time remained it would be OK. We were lucky. We were able to accomplish not only the basic program but also all supplementary programs, including installation of this antenna.

Q: Was it hard to install?

A: No. It fit easily into the socket on the body of the spacecraft. So from the technical point of view, we were ready to operate by the end of October [1988], but didn't have any operating experience. Nor was our hesitation alleviated by our first contact with Atlanta (W4BIW). We heard poorly, and thought it would always be like this. But very soon we had normal contacts, including some with stations with deafening loudness.

Q: What was the reaction of the first stations you worked?

A: At first we weren't convinced anyone could hear us. I tried several times (maybe not too delicately) to enter into contact with stations working each other, but without success. Finally, we "broke" two American shortwavers. They copied my callsign and exchanged remarks along the lines "Do you understand anything?" "No!" "Me either. It's probably someone playing a trick on us..." But Indian shortwaver VU2LK said straight out during our first contact that he didn't believe we were operating from a spacecraft. All I could say was "But it's the truth!" Well, the information finally got around the world, and then the problem was the number of stations calling us.

Q: By the way, what about the language barrier?

A: There were difficulties with stations in South and Central America, where many radio amateurs don't speak English. Strange things happened. I got into contact with a YL-LU1YK. When she finally realized she was working an orbiting space station, she literally cried out "Wait for me a minute!" -- even though our spacecraft was racing above her country at a space rate of speed. But everything turned out well: Before the spacecraft left communication range, she had time to get LU6YH on frequency, and he spoke good English. We met foreign shortwavers who spoke not bad Russian, and many of those who didn't speak Russian tried to say at least a few words -- "Zdravstvuyte" ["hello"] and so on.

Q: Musa, what did amateur radio do for you on board?

A: During the whole flight, we looked at Earth through an illuminator. The pictures were so beautiful they took our breath away, even we had learned to control our emotions. But the planet was perceived to some degree as not being alive. Of course the traces of man's activities (both good and bad) were visible from up there, but people weren't visible or audible. And the perception of Earth changed very sharply when an amateur radio station appeared on board. It's an indescribable sensation to be flying in space over some country and have a friendly conversation with one of its citizens. The Earth, which we longed for a good deal, somehow came alive and got closer.

(Continued)

"SUCH A FAR-AWAY, NEAR-BY AMERICA"

by Ye. Kostromin, UA4RZ, President, Zilan DX Club, Kazan'

From 2 through 15 July 1989, a group of radio amateurs from Seattle (USA) were guests of the Zilan DXClub in Kazan'.

In 1985, an initiative group from the Western Washington DX Club of Seattle, headed by K7ZR and KD7IK, contacted their Soviet counterparts. After several "round tables," it was concluded that the greatest interest was in DXpeditions to Armenia and Wyoming. Unfortunately, the earthquake in Armenia [7 December 1988] forced cancellation of the expedition there, and the Zilan DX Club offered the Americans a visit to the shores of the Volga River in 1989.

There were no problems getting licenses issued for operating from USSR territory, thanks to Nikolay Valentinovich Kazanskiy, UA3AF. For 10 days, UA4/K7ZR, UA4/K7UDG, UA4/K7RA, UA4/KE7V, and UA4/WR7Q were on the air. Special callsign US4P, issued on this occasion, was very popular during the two days of the IARU Championship. In 48 hours, 6000 QSOs were conducted with 150 oblasts of the USSR and 135 countries of the world.

We plunged our guests head first into Soviet reality: They lived in apartments of Soviet shortwavers, ate our food, and used public transportation.

Twice we organized conferences at which questions were asked in both directions. We were interested, for example, in learning about conditions for obtaining permission to go on the air in the USA. We were surprised by the punctuality observed by the Americans when examinations are taken by beginners and by those wishing to upgrade. Everything's precisely regulated and perfected. You select one correct answer out of four, to 30 specific questions (seven errors are permitted). You can immediately go for extra class if you have enough knowledge. Only two of our radio amateurs succeeded in passing the examination for an American callsign (UW9AR and UA4RZ) and for extra class. It wouldn't hurt if our amateur radio authorities adopted a similar practice.

"CQ-U" -- ADDRESSES OF QSL-BUREAUS

Beginning with this issue, the editors will regularly provide addresses of QSL-bureaus, both official and voluntary ones. An attempt will be made to include all QSL-bureaus in an "oblast" (according to the R-100-O listing).

NOVGORODSKAYA OBLAST' (No. 144, 1T)

- P. O. Box 47, 173025 NOVGOROD-25 (services the whole oblast');
- 66 Leningradskaya St., 174400 BOROVICHI (Novgorodskaya Oblast') (services the town of Borovichi);
- P. O. Box 9, 175400 VALDAY (Novgorodskaya Oblast') (services the town of Valday);
- Radio Club, 29-a Lesnaya St., 175460 KRESTTSY SETTLEMENT (Novgorodskaya Oblast')] (services the settlement of Kresttsy);
- P. O. Box 1, 175200 STARAYA RUSSA (Novgorodskaya Oblast') (services the town of Staraya Russa).

PSKOVSKAYA OBLAST' (No. 149, 1W)

- 16 Shkol'naya St., 180006 PSKOV-6 (services the whole oblast');
- 12 R. Luxemburg St., 182000 VELIKIYE LUKI (Pskovskaya Oblast') (services the town of Velikiye Luki and the surrounding rayon).

MURMANSKAYA OBLAST' (No. 143, 1Z)

DOSAAF Combined Technical School, 4 Dzerzhinskiy Street, 193792 MURMANSK (services the whole oblast');

P. O. Box 460, 184200 APATITY (Murmanskaya Oblast') (services the towns of Apatity and

Kirovsk and the settlement of Polyarnyye Zori);

UZ1ZWG, P. O. Box 19, 184284 OLENEGORSK (Murmanskaya Oblast') (services the town of Olenegorsk).

QSL VIA...

UZ1PWA is the QSL manager for UA1PAU (Cape Sin'kin Nos), UA1PBD (polar station Yushar), RA1QEG/RW1P (polar station Kara), and UB5MAL/UA1O (Novaya Zemlya). QSL cards should be sent to P. O. Box 73, 164744 AMDERMA (Arkhangel'skaya Oblast').

For Soviet amateurs, the QSL manager for RZ1OWA is UZ1OWW, whose address is 164500 SEVERODVINSK (Arkhangel'skaya Oblast').

QSL cards for R1ATM and EO1ATN should be sent to UZ1TWW.

"ON THE HOSPITABLE SOIL OF VIETNAM" by A. Chernykh, UL7PAE, Temirtau, Karagandinskaya Oblast'

The idea of organizing an expedition to Vietnam was born almost three years ago. But serious work didn't begin until January 1988, after Viktor Grunskiy, RL7GK, scientific secretary of the Association of Young Scientists Attached to the Central Committee of the Komsomol [party youth organization] of Kazakhstan, visited us at RL8PYL. It turns out that the Komsomol of Kazakhstan has a [pobratim - counterpart organization?], the Union of Communist Youth Named After Ho Chi Minh in the province of Shongbe. There was now a real possibility of carrying out our expedition within the framework of businesslike cooperation between these two friendly organizations.

The international amateur radio organization INDEXA provided our expedition an FT-101-Z transceiver and a two-element TA33M antenna. Gennadiy Kolmakov, UA9MA [who visited Washington last Fall], was of great help in delivering this equipment to us. Soon an invitation was received, documents were drawn up and signed, tickets were bought, and everything was assembled and packed.

On 23 January 1989, A. Lebedev, UL7PCZ, Yu. Loparev, RL8PY, and the author set off to Alma-Ata and Moscow. After an 18-hour flight from Sheremet'yevo-2 airport in Moscow, and 4 stops, our IL-86 landed in Ho Chi Minh City. Moscow saw us off with a freezing day, and the hospitable land of Vietnam greeted us with 35° [= 95°F] heat. Our Vietnamese friends greeted us no less warmly.

Upon arrival in Tkhudaomot (40 minutes north-west from Ho Chi Minh), we installed ourselves in our hotel. In one room we set up the basic operating position with the FT-101-Z. In another, a second operating position with the "Meridian" and "Ural." We installed a tilted triangle [Delta loop?] for 7 MHz and the TA33M antenna on the roof. We went on the air at 1900 local time. The 7 MHz band was so noisy that we only had a few contacts with Japan. But there was excellent propagation on 14 MHz; some gave us 59+20dB.

A few minutes later many stations from North America, South America, Africa, and Oceania began calling us. This was so unexpected that we gathered around the transceiver and couldn't believe our ears. Distant propagation to all continents, which continued on this band almost the whole night.

Over the next two days, we installed our 5-element 28 MHz YAGI, 4-element 21 MHz YAGI, tilted 7 MHz dipole, and 3.5 MHz "Inverted-V." During the day and we had friendly meetings, but we tried to leave at least one operator on the air.

A word about propagation. Basically Japan and Oceania were audible on 160m. Europe, but only Western Europe, came through only two mornings. We had almost no QSOs with Soviet stations, although we heard them and even called them. Here we should note the very good operation of UA1OLL and UA1OT (Franz Josef Land), whom we worked without difficulty on all six bands.

The situation was about the same on 80m, on which, as was also true of 40m, there was a high noise level. On 20m, Europe often came through long path in the morning. On 15m, there was extremely poor propagation to Europe, but this wasn't so for Japan and the USA. On 10m, many QSOs were made with Soviet stations, but in the morning we heard North America well. Naturally, there were very many QSOs with Japan. We also devoted a certain amount of attention to operating in nets: YB3CN, I8YCP, W7PHO -- FAMILY, INDEXA -- DX NET, RB5FF, and so on.

Later analysis of the 3WØA log indicated that many Soviet radio amateurs evidently considered it their duty to have a QSO with us almost every day... This of course isn't a violation of ethical behavior, but as a result tens of other radio amateurs may have found it impossible to contact us at all.

The four final days we operated with the callsign 3W4KZ. We looked for satellites, but apparently the 21/28 MHz repeater wasn't switched on. Sometimes the electricity went off two or three times a day. Nonetheless, operating with the callsigns 3W1A, 3W0A, and 3W4KZ, we had over 37000 QSOs. The rate on SSB got up to three QSOs a minute, and on CW to two QSOs a minute.

We enjoyed operating RTTY with the callsign 3W1A. We used a "Radio-86PK" computer with a controller designed by DJ6HJ and a portable television set. Only one operator, UL7PCZ, operated RTTY. On account of not having a narrowband filter in the transceiver during pile-ups, we couldn't have a great number of QSOs, since up to 20 stations would immediately call us on frequencies that overlapped [perekryvalis']. As a result, we made [only] about 1000 contacts with 50 countries of the world on 14, 21, and 28 MHz.

Twenty days flew by before we knew it. It was sad to leave the hospitable land of Vietnam, but we flew off in hopes of many return visits.

We donated all of our equipment, antennas, and masts to the Vietnamese radio amateurs and hope to hear them on the air in the near future.

[From the "NLD" column in the weekly newspaper "Sovetskiy Patriot"] NLD-1425, 12 - 18 February 1990:

Collective and individual radio stations of the 1st category may [now] employ packet radio and slow-scan television on shortwave [HF] and ultrashortwave [VHF/UHF/SHF]. There is no requirement to apply for special permission. For packet communication the AX.25 protocol must be used.

Until the end of this year, Soviet shortwavers, in international telephone contests in which contacts on 80m count, may use the "upper" part of this band -- up to 3800 kHz

NLD-1429, 12 - 18 March 1990:

Cosmonauts Anatoliy Solov'yev, U6MIR, and Aleksandr Balandin, U7MIR, have begun to operate on 2-meter FM from the "Mir" orbiting complex. For the immediate future, their basic operating frequency will be 145,500 kHz.

g g g

The 12th Annual Wheeling Hamfest and Computer Fair

Sunday May 20, 1990 8:00 am to 3:00 pm White Palace - Wheeling Park Wheeling, West Virginia

Admission \$2.00 in Advance \$3.00 at the Door Women admitted FREE Youths 16 years old and younger admitted FREE

More Prizes and Awards will be given away than at any Comparable Hamfest
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Universal Amateur Radio of Reynoldsburg, Ohio will be there

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1st Prize Kenwood TS440S 200 W Transceiver 7th Prize **REA Isopole 144 Antenna** 2nd Prize Coleman 4 KW Generator 8th Prize 6 Filet Mignon Steaks 3rd Prize HR2600 - 10 MTR All Mode HCUR 9th Prize 1990 DX Callbook 4th Prize Yaesu FT-411 Two MTR HT 10th Prize 1990 U.S. Callbook 5th Prize McCulloch 14" Gas Chain Saw 11th Prize RRRL/TSRAC 1 yr Mbrship 6th Prize **REA AT-300 Antenna Tuner** 12th Prize Timex 6MT LED Clock

Directions on two repeaters - 146.91 and 146.715

For more Information and Advance Tickets Contact:
The Triple States Radio Amateur Club - TSRAC
Box 240 RD 1 - Adena, Ohio 43901 - Phone: (614) 546-3930

The One Hamfest you Don't Want to Miss!



ARRL NEW YORK STATE ATLANTIC DIVISION CONVENTION

Rochester, New York May 18, 19, 20, 1990

"AMATEUR OF THE YEAR" AWARD

They do more for Amateur Radio than they do for themselves. They are the people we think about when we're feeling proud to be an Amateur.

This is how we say, "Thank you."

Nominate that special Amateur in your area for the Atlantic Division "Amateur of the Year" award Recognizing outstanding contributions to the Amateur fraternity, the award is announced at the Hamfest/Convention banquet and is commemorated by a handsome plaque.

Do this for someone who does so much for Amateur Radio.

Nominations deadline is April 20, 1990.

For nomination forms, send a request to:
Richard A. Goslee, K2VCZ
Chairman, Rochester Hamfest Award Committee
24 Elaine Drive
Rochester, New York 14623-5306

1990 Selection Committee: Richard Goslee K2VCZ; Hugh Turnbull W3ABC, Director, Atlantic Division ARRL; William Thompson W2MTA, ARRL Section Manager, Western New York; Kay Craigie KC3LM, 1988 Amateur of the Year, Mayer Zimmerman W3GXK, 1989 Amateur of the Year.



Have Bug - Will Travel

Howard B. Johnson - W4IIG

ALASKAN COMMUNICATIONS, EARLY HISTORY

By the last decade of the 19th century, Alaska's population was growing, spurred along by gold mining, an increase in the world demand for furs, and by the burgeoning fishing industry. Since no single commercial communications entity was willing to provide service to all settlements, a high level government decision was made requiring the United States Army Signal Corp to establish, maintain, and operate what soon became an extensive system.

Initially, Morse Telegraph stations with open wire lines connected the "outpost" villages throughout the Territory to "hub" locations at Fairbanks and Anchorage. Early on, a submarine cable was laid across Norton Sound to facilitate communications to/from the Nome area. In the beginning, the only outlet "outside", that is to the contiguous United States, was via a single Morse wire to British Columbia connecting the Territory with the Canadian National Telegraph network. By 1904 additional ocean cables were laid, eventually connecting Seattle, Ketchikan, Juneau and Anchorage (via Seward).

By this time, "Spark" was coming into being and over the years this new-fangled "Wireless" gradually replaced the wire-telegraph. The change was not welcome to most of the operators, as they had been trained in American Morse whilst the wireless system utilized the International Code — such was progress! By 1931 most of the stations had been or were converting to "Radio" - which was now firmly entrenched in the American vernacular as the replacement for the now-archaic (to U.S. ears) "Wireless".

Along with this modernization came fast and efficient Boehme-Kleinschmidt mechanical keying and inked-slip recording system which "upped the speed" of circuits from 30-40WPM to 300-400WPM. Major hubs such as Anchorage, Fairbanks, Juneau Ketchikan were tied into this modern network by the late '30s while manual radiotelegraph connected the outlying ACS stations with salmon canneries and with ships at sea. American Morse was still utilized as tie-in to the Alaska Railroad connecting Anchorage Fairbanks.

By the end of the 1930s, voice communications to/from the "lower 48" was initiated at Anchorage, Juneau and Ketchikan. By 1943, with the tremendous escalation of communications requirements brought about by the war with Japan, the system had grown immensely and had spread "to the Westward" out through the Aleutian Chain. CW was King, manual and high speed slip carrying the bulk of the traffic.

The original ocean cable system to/from "the States" had been removed from service in 1931, superseded by radio circuits; to be restored to service shortly after the beginning of hostilities. Carrying on until the mid '50s, the Signal Corp provided the only hard-copy electrical communications within the Territory/ State and with the outside world.

Standby for more, in future issues of Auto-Call! nb: For details, see the publication "U.S. Army In WW-2 - The Signal Corp, The Emergency."

Howard Johnson - W4IIG



DX Fun on 10 Meters Ken Easton - N3HLY

"CQ 10-10, CQ 10-10, this is N7EMY calling CQ 10-10 and standing by."
"N7EMY this is N3HLY, over."

This is how it all began. We exchanged 10-10 numbers and our QTH along with first names.

N7EMY was Ron in Everett, Washington and he asked me if I would like to stay on the frequency for a net that was about to begin called Citrus Belt, Inc. This is one of the many Chapters of 10-10 International that come on every day at scheduled times.

Of course you have to be a paid up member of 10-10 international. Ron was an instant qualifier and gave me all the details on joining the Chapter. I sent off my letter, along with a copy of my 10-10 membership card and SASE to Jim - KB6RSW, manager of CBI. A few days passed and in the mail I received a nice

8 x 10 certificate, along with a log and instructions on how to figure your points as you make contacts with other members.

There are over 1300 members in this single chapter. There is so much fun involved passing points with 10-10 members in Hawaii, Australia, South America, Africa, Europe and many islands. When you reach certain levels and mail in your points, the certificate manager sends back attractive certificates for framing.

I never realized how much pleasure one could have until I answered that CQ from N7EMY. Since then I have made many friends on radio and collected more enjoyable QSL cards from all over the world. Try it, you'll like it.

This Is Your Life J. Edgar McDermott, NS5N

Do you remember your first log? Do you still have it? Even with over 1½ million Amateurs in the United States now, I would bet the answer is a unanimous "Yes."

My first log had just turned twelve years old a few months back, when it turned up while I was reorganizing (cleaning) the "shack" once again. Over the years, it has been entered into various makes of computers at least three times in an effort to "consolidate space," but for some reason I can't toss the original out.

I remember receiving my Novice license and immediately going downtown to purchase two things that I had been dreaming of: #1 a brand new Yaesu FT-101 EX with the extra crystals to fill out the ten meter band; and #2 my first ARRL Amateur Radio station log.

I proudly placed my call - KH6JSG on the front cover for one and all to see. My very first entry read: "17 October 1977... Novice license arrived...

And that is how my logs have been ever since. Each exam I took was noted, along with the arrival dates and new calls, station relocations, and visitors. If it took place in the "shack" it was noted. Even when logging was no longer required, the entries continued. I have often thought that someday I might like to write my memoirs, but then again, that would be redundant. For, as you see, my radiolog is more than just a log. For the most part, it is my life. At least the part I'll remember best.

Congratulations to:

Phil Russo - N3GDD on being elected president of the Foundation for Amateur Radio. See new masthead on page 3 and Editorial on page 4 for complete list of new officers.

Larry Horst - KA3SDJ on being selected this month's Ham of the Month. (See p.33)

QCWA Members who were presented Golden Anniversary Certificates recognizing from 50 to 70 years of Amateur Radio service. (See page 39)

Congratulations to Nell Smith on celebrating her 100th birthday on April 2. Nell is the mother of Ethel - K4LMB and was licensed briefly as Novice N4VHM back in 1960.

Silent Keys

Rufus L. (Rudy) Williams - W3UBZ, President of the Metropolitan Communications Network Radio Club, became a Silent Key March 7, after a courageous struggle with lung cancer. His training at the Army's "School for Signal Corps Projectionists" prepared him to become a sound engineer, after the war, at the Howard Theatre. For more than 10 years his work supported the performances of many outstanding artists, including Pearl Bailey, "Moms" Mabley, James Brown, The Temptations, and Dinah Washington. Rudy also engineered the sound for special events and shows at Constitution Hall, Carter Barron Theatre and the Convention Center. He was a member of the Quarter Century Wireless Assn, OMIK, the ARRL, CCARS and Roosters. An enthusiastic lodge member, he was actively involved in Redeption Lodge #24, Mecca Temple #10, the Jonathan Davis Consistory #1, 32° and the Charles Young Chapter #3 of the Disabled American Veterans. He is survived by his wife Bessie and a son and daughter. In the best tradition of Amateur Radio, Rudy was always ready to help other hams. He will be sorely missed.

(Submitted by Robert Sporn - WA3GGO, MCNRC Secretary)

Joseph A Moskey - W1JMY, became a Silent Key March 22. Employed at ARRL Headquarters for 40 years, and retiring as Circulation Manager, he was also very active in QCWA and a number of other local and national Amateur Radio organizations. He was also very much involved with computers. He held the call W1JMY since 1935. During World War II, he worked for $3\frac{1}{2}$ years at the Massachusetts Institute of Technology radiation laboratory and at its British branch in England. He is survived by his wife, Norma, a son and two daughters.

(Submitted by John Swafford, W4HU)

Donations to the scholarship fund in honor of Karl Medrow - W3FA are being collected by the Goddard Radio Club (WA3NAN). They are well over half way to their target. For further information and/or contributions, contact Frank Bauer -KA4HDO or Vikki Gigante Huerber - KA3PVS.

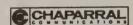
(Submited by Fred Laun, K3ZO)

"Now It's More Than Satellite TV"

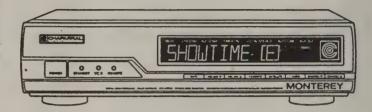
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Ham of The Month

Larry G. Horst - KA3SDJ

Larry G. Horst, President of the Antietam Radio Association, Inc., is one of those dynamic, dedicated people who make this hobby great. "He's always there when you need him" is the phrase you hear from so many. An Advanced Class licensee, active in MARS, devoted to his family but with time for public service and technical frontiers, that's Larry.

Goodwill ambassador for the ARA and ham radio, he can be seen at many area hamfests and other gatherings, hosting a group at his van, making an equipment swap to help a new ham get started, etc. Larry is one of the key members of the safety and communications team at Mercersburg, Pennsylvania, for the annual Halloween parade. He has donated time, money and expertise to get the packet station installed in the Civil Defense comm center in Hagerstown: He acquired and donated the TNC to make CD comm drills on packet possible at that location. KA3SDJ is also a leading source of ATV in the Hagerstown area and Larry has made some very effective experiments with balloon-held antennas on 160M HF. With all this going on, he's still found time to almost double the size of his house with Larry-built additions and inspired daughter Terry to gain her Novice license.

Larry is the ARA's sparkplug. His tenure as President will be a tough act to follow: On his own initiative he's gathered broken and donated equipment, rehab'd it and sold it at hamfests to benefit the club treasury. Larry has donated generous amounts of time, money and equipment to the club, its members, and anyone else who seemed like they needed a hand. Recently he powered up his welder, pulled some steel out of his salvage collection and built a mount for a new antenna to go up the mountain with the ARA's main two-meter repeater. Just to take up the slack in his idle time, he's been working on a scenario for a ham radio videotape to be presented at local schools. If others don't step forward to help, he's likely to be producer, director, cameraman, grip and story editor when this goes into production.

While all this action is going on, Larry's unchangeable good nature is there for all to enjoy. He never hints; he speaks directly. If there is a negative remark to be made about someone, he is always silent. If someone else makes such a remark, Larry will point out that such comments don't solve problems, and then lead the discussion toward comments that do. He just keeps on going in our hobby, at work, with his family and with the community. The message he has for all of us is clear to see if you look at his face: "Aint no way nobody can rain on my parade!"

Submitted by Roy Bates - N2CSQ/3

Nominations for Ham-of-the-Month are actively solicited.

Here is an opportunity to recognize some of the people who contribute so much to Amateur Radio and to our enjoyment of the service. Send nominations c/o Auto-Call.

Foundation for Amateur Radio

Ham of the Year

Karl Medrow - W3FA

Karl Medrow - W3FA was named by the Foundation as the 1989 Ham of the Year.

Karl had been very active in operating and organizational work in Amateur Radio since the early 1930s. He was an enthusiastic traffic handler and served as Maryland-DC Section Communications Manager from 1971 to 1985. Few people have devoted more to Amateur Radio. See his nomination for Ham of the Month in the February issue of Auto-Call.

Unfortunately, Karl became a Silent Key on December 26, 1989. It is with deep regret that this award had to be made post-humously. His widow, Muriel Medrow accepted the recognition at the FAR/QCWA Annual Spring Banquet.

Ham of the Month Criteria

Following are guidelines for nominations for FAR HAM OF THE MONTH.

QUALIFICATIONS: ANY licensed Amateur in the local area who has contributed significantly to the Amateur service and/or its image in the community.

REQUIRED INFORMATION: 1. Name, call and address of nominee.

2. Description of the contributions which have been made by the nominee.

3. Name, call and phone number of person making the nomination.

NOMINATION FORMAT: Nomination in narrative form is preferred. Please be sure the material is factual. We would like to keep the finished article to no more than one page (about 1800 words), but you may write as much as you need to do a good job of "selling" your candidate. Any necessary editing can be done later by the committee. In most cases the committee will be in touch with the person who submits the nomination before publication is made.

AWARD PRESENTATION: Whenever possible, Ham of the Month awards will be presented by a FAR representative at a local club meeting or special activity.

There are over 50 clubs within the Foundation and there must be many "special" people deserving of recognition. Send in your nominations any time throughout the year. Development of the award process will be based on the volume and quality of activity.

Three Foundation Trustees will serve on the committee to select the FAR HAM OF THE MONTH. Both Maryland and Virginia residents are involved on the committee and they are hoping to receive nominations from all local clubs and all jurisdictions. election of one candidate will be made each month. Any additional nominations may be held for consideration in future months. We suggest maintaining confidentiality whenever possible. Any award is best received as a surprise.

For further information contact HAM OF THE MONTH committee Chairman Tony Young, WA3YLO at (301) 262-1917. Send nominations in care of AUTO-CALL.

P.O. Box 7612 Falls Church, VA. 22040-1452

Too Much Time J.E. McDermott - NS5N

Don't you just love our worldwide system of time? Just think, no matter where you are you can look at the sun, high in the sky, and say, "Gee, it's just about lunch time." Do we really need a clock for that? Ever tried to figure out the time tables for buses on long hauls or airline flights?



I know it isn't really that difficult, but why should it be necessary at all to have to run through all of those mental calculations in the first place?

One world, one time. Amateurs have had, since the beginning, a better grasp of world time than perhaps even the military.

For a ham that has been on the air on a regular basis, UTC is a way of life. Some of us even wear dual time watches that display both local and UTC. I don't even want to get into the clock manufacturing end of this topic.

We seasonally change our clocks along with our bodies to "Spring Forward" and "Fall back." This only adds to the confusion of the rest of the world. They had been happily synchronized with us for the last six months and suddenly have to figure out if it is an hour earlier or an hour later than it was yesterday.

UTC or Greenwich has been accepted as a reference nearly worldwide. Why not just use that time as a reference? I am sure there would be a lot of opposition at first, but look at the advantages. It is especially handy for those traveling overseas. If you got on a plane leaving at 1300 UTC and it was supposed to arrive

at 1536 UTC, you wouldn't have to ask what the local time would be there or how long the trip was going to take. There would be no confusion if you knew you were supposed to make a telephone call between the hours of 1600 UTC and 0100 UTC. And it would be easier to avoid any of those embarrassing middle-of-the-night calls about the shells you found on the beach today. While on Guam Island, 0000 UTC would come at 10:00 a.m. every day. At 0200 UTC or 12:00 p.m. we would start eating lunch. What is so difficult about that?

Adjustment really wouldn't be that difficult. It is like the old adage of the man who used the string for a weather gauge: if it was hanging loose, it was a calm day. If it was standing out, it was windy; If it was wet, it was raining; and if it was gone, it was too stormy to worry about the string.

Foundation Meetings

The Foundation for Amateur Radio meets at 8:00 p.m. on the second Wednesday of each month.

Meetings alternate between Maryland and Virginia:

In odd numbered months, meetings are held in Virginia;

School Building at 1108 Jefferson Street, Alexandria, VA.

In even numbered months, meetings are held in Tacoma Park, Maryland:
Columbia Union College Science Building Auditorium, Flower Avenue

Talk-in on 147.315

Visitors are always welcome

Membership is open to any Amateur Radio organization in the local area.

The next meeting will be May 9
At Alexandria, Virginia

MANASSAS HAMFEST

AMATEUR RADIO AND COMPUTER SHOW

AN ARRL APPROVED HAMFEST

SUNDAY, JUNE 3, 1990

PRESENTED BY THE OLE VIRGINIA HAMS A.R.C., INC.

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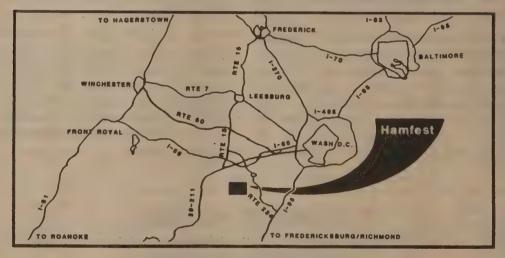
2nd - XT Color Computer 3rd - ICOM IC-228H

*** FOOD PROVIDED BY PARK WEST LIONS CLUB *** INDOOR EXHIBIT SPACE AVAILABLE FOR DEALERS AND MANUFACTUERS

GENERAL ADMISSION: \$5.00 Per-person at gate No advance sales Gates open at 8.00 A.M.

TAILGATING: \$5.00 Per-space in addition to general admission Gates open at 7.00 A.M.

PRINCE WILLIAM COUNTY FAIRGROUNGS 1/2 MILE SOUTH OF MANASSAS ON ROUTE 234, TALK IN ON 146.37/97 AND 223.06/224.66 REPEATER



GENERAL INFORMATION

Ample room for tailgating - 25 acres.
Building available for set-up from 2:00 P.M. until 10:00 P.M. on Saturday the 2nd.

Prior written approval for food venders must be obtained from Hamfest Chairman.

Dealers Information Call: Joe (K4FPT) 703-368-8599

General Information Call: Rosemary (KI4VO) 703-361-5255

Mt. Vernon Amateur Radio Club

Meetings: Second Thursday of Each Month, 7:30 p.m.

Mt. Vernon Governmental Center, 2511 Parkers Ln., Alexandria

WD4PDP/R 146.055 input 146.655 output

Nets: Every Tuesday at 8:00 pm (0100 UTC Wednesday's)
Starts on 2-meter then moves to 10-meter on 28.405

Information: Chris Morrow, W4WYL (703)765-5964
Training Classes: John Forrest, NZ4A (703) 971-3905

Mailing Address: c/o Chris Morrow, W4WYL, 7408 Recard Ln., Alexandria, VA 22307

March's program was presented by Officer Purvis Dawson of the Fairfax County Police Department. He talked about the 911 emergency service and its proper use. It seems that the 911 service is still used incorrectly by many people. Officer Dawson's discussion was also punctuated with some amusing stories making the evening both informative and entertaining. Thank you so much, Officer Dawson.

Repeater:

March brought us two new members: Steve Bookout - NJ4F and Richard Van Dyk - KK4AY. WELCOME to the group-we're delighted you chose to join. March also brought us seven visitors: Ed Landenberger (no call), Ross Merrick (no call), Jason Corder - KA8QHB, Rich Adamy - KA4GFY, Ed Speakman - W3AUR, Aaron Claxton (no call - Jim's son) and Emily Hood (no call, Steve's daughter). We can't overstate how pleased we are that you visited with us - WELCOME.

CONGRATULATIONS are in order for Tom Garlington who passed his Novice exams, Luis Villalobos - KC4NUE who upgraded to Technician, Jim Barnes - KB4WBO who passed his General written exam, Frank Mackey - N4GUS who upgraded to Advanced and Ken Simmons who received his new call - N4YGN. Well done....keep up the good work!

May will be the start of a new fiscal year which means we will have a new group of officers. Our heartfelt THANKS are extended to Steve - KB4WKK, Mike - KE4ER, Glenn - W4OCC and Chris - W4WYL for all their work on behalf of the club during the past year.

I'm going to be criticized soon for repeating myself, but we must crow once about the March turnout - 70 people! WOW WHAT A Turnout! I hope May's meeting will bring more members and visitors than ever before. It is bound to be fun. See you on the 10th.

Marci - KM4VM

SAFE BOATING FESTIVAL

The Federal Communications Commission, Baltimore Office is sponsoring a one day "Safe Boating" festival on Friday, June 29, at the Bahia Marina, located at 2107 Herring Way in Ocean City, Maryland. The event will be held from 1:00 to 5:00 p.m.

The purpose of the festival is to promote boat safety during the 1990 boating season.

Radio station WKHI and others will broadcast the event live.

The FCC's mission is to promote the effective and efficient use of the communications spectrum and to ensure and preserve the safety of life and property.

For more information about the upcoming event, please contact:

Marlene M. Jackson 1017 Fallon Federal Building 31 Hopkins Plaza, Baltimore, MD. 21201 (301) 962-2728

(FCC News Release 4/90)

Prince George's Wireless Assn.

Meetings: First working Tuesday of each month, 7:30 p.m., American Red Cross

Service Building, 6206 Belcrest Road, Hyattsville, MD 20782

Club Station: K3CEZ

Mailing: 4109 Kennedy Street, Hyattsville, MD 20781 Information: Frank Holton, WA3ZMW (301) 927-1245

PG Wireless Assn. welcomed two recent members – Vincent W. Burgher - KA3UWV and Tung Wu - KA3VQC. Vincent is active on 10 meters and is diligently working to upgrade to General Class. Tung is a new Technician and hopes to be on the air as soon as he obtains some equipment.

On February 15, the American Red Cross, P.G. County Chapter, and PGWA signed a letter of understanding. The agreement updates responsibilities of each organization and solidifies their relationships.

Don Bedell - KA3BKU, club secretary for many years, departed this area to take up residency in Houston, Texas. We wish him well, and will miss his friendship and his participation in PGWA activities. Other area Amateurs are acquainted with his 2-meter support in the annual Marine Corps Marathon.

Ted Fisher - W3EOV, a perennial snow bird, is on an extended visit in Florida.

Ken Easton - N3HLY, designs his QSL cards with varying motifs. He sends them direct and the returns are better than 60 percent. Ingenuity evidently pays off when one tries to earn a DX 100 award.

Holly Turri - N3FCA is a new mother again; Daughter is Tracy Lynn. Just before the big event, Holly upgraded to Advanced class. Double congratulations!

PGWA is "looking for a few good Amateur Radio operators" to affiliate with the club. In addition to engaging in Red Cross telecommunications, we offer as a "perq" the opportunity to utilize the HF and VHF equipment at the club's station.

Ken Easton - N3HLY

FAR/QCWA Annual Spring Banquet - Continued

QCWA Golden Anniversary certificates were awarded as follows:

70 Years

65 Years

60 Years







Plans are already underway for the 1991 Banquet. Don't miss this one.

FAR/QCWA Annual Spring Banquet

The Annual Spring Banquet was pronounced a big success by all who attended. There was a good turn out, good food, and an excellent speaker. We were honored by the presence of many VIPs, including Harry Dannals - W2HD, Hugh Turnbull -W3ABC, Ambassador Armin Meyer - W3ACE, and speaker Bruce Brown - WA9GVK.

Master-of-Ceremonies duties were shared by FAR President Bob Moore -N3CKD and by QCWA Chapter #91 President Jack Kelleher - W4ZC and Chapter #23 President Granville Klink.

Presentation of QCWA Distinguished Service Award was made to Hugh Turnbull - W3ABC in recognition of the outstanding work he has done in connection with the scholarship program.





Bob Moore - N3CKD

J. Kelleher - W4ZC

Presentation was made of "Golden Anniversary Certificates" to a number of QCWA members recognizing service of from 50 to 70 years in Amateur Radio).



Presentation was made by QCWA National President Harry Dannals, W2HD (also Past President of ARRL).



QCWA Golden Anniversary certificates were awarded as follows:

Tom McNulty - W3ZG 70 Years -

65 Years -

Emerson Mehrling · W4NH, T. Lee Dorsey - N3BHC Bill Grenfell - W4GF, Armin Meyer - W3ACE, Ed Speakman - W3AUR 60 Years -

Jack Bobbitt - W4HV, John Bennett - W4ZEI, Bruce Green - W31R.

Henry Herman - W3UJ, Elmer Jones - K4EUX, Stuart Meyer - W2GHK Ed Morrison - W3RY, Camille Marie - W3EPR, Tom Smith - W3LOV

(Continued on page 38) Joe Ziglinski - W4DIN

Shenandoah Valley Chapter #137 QCWA

Meetings: 3rd Wednesday of alternate months, with some exceptions.

Jimmy's Restaurant in the Holiday Inn on Rt 50 at I-81 Exit 80

Winchester, Virginia. Social Hour 5:30 p.m. and Dinner ordered at 6:00

Guests are always welcome - reservations are required. Information: Guy Black - W4PSJ, Secretary/Treasurer (703) 722-4952

1201 Woodside Drive, Winchester, VA 22601

The Shenandoah Valley Chapter No 137 of the QCWA met on Wednesday, March 21 at Jimmy's Restaurant in the Holiday Inn, with 28 members and guests present. Lloyd - NC8G was particularly welcomed after a long absence due to ill health.

Following business formalities, Charles Anderson - N3FX was presented with his 50 year QCWA Gold Certificate with a 55-year endorsement. Charlie noted that the code test for his original license had been administered by George Sterling, using a hand key!

It was noted that Larry - W4LHI had passed away since the last meeting and that Irv Lavitz - WD4JSN had been ill. N4MM reported on League affairs, noting a planning session scheduled for May 19-20 in Ashville, NC. Bill Grenfell reported on a recent old-timers' get-together at the Ft. Meyer Officers Club. President Johnson raised the question of a Chapter presence in some form at the Berryville, Va Hamfest, scheduled for August 5th.

Recycling in the Nineties was the subject of a talk by Gary Williams, Chairman of the Resource Committee of the Winchester Chamber of Commerce.

He noted the mandate from the Virginia legislature to reduce the solid waste brought to landfills by 25% by 1995, that many landfills have already been closed, and space for new ones is expensive and hard to find. In many places, households and businesses already are required to sort out solid waste by types to expedite recycling, and the practice will spread. Fees for disposal of trash are certain to increase sharply and thus provide a real economic incentive to minimize trash. Careless habits of the past, such as dumping old motor oil in ditches and drains is responsible for many instances where expensive cleanup is necessary. Chapter members called to the speakers attention that hams were experienced recyclers of electronic gear from government and commercial surplus and had even made antennas out of discarded beer cans when they were still made of steel.

The next meeting will be held on Wednesday, May 17, at Jimmy's Restaurant (the usual place) at the usual time of 5:30 p.m. for a social hour. The program will be a documentary film on the life of Guglielmo Marconi. We go out of our way to encourage guests.

Guy - W4PSJ

Golden Anniversary Awards
To Roy Cartier, K4AC by W3HQX To Perry Crabill, W3HQX by W44HVU



QCWA Chapter #137 1988



Woodbridge Wireless, Inc

Meetings: 3rd Tuesday of each month, at 7:30 p.m.

Tall Oaks Community Center, Lake Ridge.

Intersection of Hedges Run Drive and Cotton Mill Drive.

Repeater: WB4FQR/R 147.84/24 and 449.9/444.9

WB4GJZ/R 223.18/78

Nets: Mondays, 8:00 p.m. local (0100 UTC) 147.84/24, 223 18/224/78

(the repeaters are linked for the net.)

Wednesdays, Slow CW at 8:00 p.m., 21.164 MHz

Saturdays at 9:00 p.m. in new 10 Meter Novice band 28.460 MHz SSB

Mailing Address: P.O. Box 112, Woodbridge, VA 22194

Hello from the Woodbridge Wireless, INC. After a long haitus I hope this column will be a more regular part of Auto-Call. WWI now has 104 members. Our budget is based on approximately 120 members so we're looking for kindred Amateur souls to join us in the fun. And what fun it is.

The crew races started at the Occaquan River on March 31 and will run for about 10 Saturdays. Volunteers are needed to provide communications support. The Lake Ridge Runners club will have its Spring 5-k road race on May 6. Volunteers are needed to provide communications support. Anyone who would like to participate in any of the events should contact Joe, W4ADM. You can find him on the repeater.

The Novice/Technician classes are going great. Five persons passed the code test and three have passed the theory. There will be a General/Advanced/Extra instruction class in May after the Novice/Technician class ends.

As usual, the WWI is conducting Amateur exams after the class ends. This spring, exams are scheduled for 0830, Saturday the 12th of May at Our Lady of Angels school in Woodbridge (off Highway 1 across from Marumsco shopping center).

A UNIX computer has been donated to the club for use as a land-line and packet BBS. It will be installed at the home of Don - K4NGC. It is a Cubix computer, donated by Micro Research Industries, Inc. It has 2 meg of memory, 290 meg of disk storage and 8 serial ports. Don is setting it up to support three packet ports, one a BBS, and a landline BBS.

John - K4EBS presented his show on rabbit-hunting (hidden transmitter hunts). Our primo bunny-buster, he has updated his technique to include computer support to hunt the elusive long-ears. A couple of good angles and the computer tells you where on the map to look. John says it doesn't take the fun out of it. It does give the unsuccessful hunters a new excuse....

We have an official greeter now. She is Robin, N4VZU. Thanks, Robin. And thanks to all the members of WWI who donate their time to make it a better club and a better community. Come join us at our meetings at the Tall Oaks community center every third Tuesday.

Jim - WJ4M



Vienna Wireless Society

25 Years of Public Service

Meetings: 2nd and 4th Fridays of each month, 7:30 p.m.

Vienna Community Center, 120 Cherry Street, Vienna, VA

K4HTA/R 146.085 in/146.685 out

222.340 in/223.940 out, 448.250 in/443.250 out

Nets: Every Thursday at 7:30 p.m. on 146.085 in and 146.685 out. Pow-Wow Net Every Night at 9:00 p.m. at 28.400 MHz

Brian Treadwell, WV4V (703) 938-1442 (H), (202) 457-7179 (O)

Paul Wilkins, AB4CY (703) 560-2779 P.O. Box 418, Vienna, VA 22183

Information:
Training Classes:
Mailing Address:

Repeaters:

Our late March meeting was the Club's annual banquet and was held at the Westwood Country Club in Vienna. Eighty members and guests attended, including the Mayor and Fire Chief of Vienna. The door prize of a 2-meter handheld was won by Tex - KJ4SS.

The Club's new directory is out and available. It lists our two hundred plus members. Ten percent of our membership is not local. They live in eleven states and one foreign country!

John Reiser - WQ4L presented an interesting program of anecdotes from his experiences in the enforcement activities of the FCC monitoring bureau. John's relaxed style of delivery produced an entertaining club program.

A Saturday afternoon expedition to the club repeater site, to track down some elusive now-and-then missing db, proved

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to be a great success. Feedline connectors seemed to be the culprit. Mike Steussy - WO4Y played steeple jack and Dick Lum - NH6E was ground master in hoisting the watt meter from end to end in a full series of tests and checks. Current reports of the repeater performance: outstanding.

The club's spring training program got under way with forty-one candidates. About 25% are going for upgrade - including seven for Advanced and Extra.

The club participated in Science Weekend at a local elementary school, with an exhibit and an on-the-air demonstration. The temporary antenna was a 20 foot metal extension ladder held upright with clothesline and fed on the bottom rung. Who says you can't improvise!

Paul - AB4CY

Metrovision - Continued

Photos from March Meeting



Chris KA3TQD Mike KA3TMQ



Walt N3GOE



Dave W3PJM

Metrovision **FAST SCAN - COLOR - ATV**

Meetings: Quarterly: Call for next meeting time and place.

Repeater: WA9GVK/4 (Video and Audio) 425-431 MHz in; 438-444 MHz out

Also accessible on 144.970, simplex, audio.

On-the-air: Sundays at 8:00 p.m.

Mailing: Metrovision, Inc., P.O. Box 8231, Falls Church, VA 22041 Dick - WB3EPX (301) 439-8135

Information: Gene - AD3F (301) 774-5307

The first Metrovision meeting for 1990 was held on March 8th at the QTH of Dick - WB3EPX and we had seventeen people in attendance. We want to thank the XYL of Lee - N4LXI for taking the time to bake some very good brownies for our meeting. A good time was had by all the friends who attended. We also want to thank Sam -N3GHY who video taped the meeting and showed the tape on the Sunday night ATV net. (See more photos on page 42).

The Montgomery County RACES is aware of the Amateur Television capabilities in the area of emergency disasters. In the future, we may want to consider some type of emergency disaster exercise in which we can demonstrate how we can work together.

The Baltimore Radio Amateur Television Society (BRATS) participated in the March fund raising campaign as telephone answerers for Maryland Public Television



Sam - N3GHY



Peter - WB3KQM

At the meeting we discussed the next project for Metrovision, which will be installing an interdigital filter on the output side of the ATV transmitter and, if need be, the horizontal polarization of the 430 MHz ATV antenna.

Mike - KA3TMQ has agreed to try to locate a suitable location for our October sit-down dinner meeting. We still need suggestions for a place for our June picnic meeting.

(Chan. 22). This event does seem like a worthwhile public service activity and something that Metrovision may want to consider for 1991. If you are interested, please let me know at the above telephone number.

We again take the opportunity to thank Walt - N3GOE for another generous donation toward the new 900MHz antenna.

See you on ATV.

Dick - WB3EPX

Baltimore Radio Amateur TV Society

Meetings: Bi-monthly, Irregular

Address: P.O. Box 5915, Baltimore, MD 21208

Any reprints from this column must be approved in advance

Work progresses on the 1990 edition of the Famous BRATS Maryland Hamfest and Computer Fest on Sunday, July 29th at the Timonium Fairgrounds. We look forward to an even bigger and better event this year, with table sales and reservations well ahead of last year at this early date.

Congrats to BRATS' VP Mike - ex-N3GDF, on his new call, KD3RK.

Many of The BRATS and many non-BRATS in the Baltimore area are joining the "ugly contest" and getting on ATV. Hope you will join us. If you have cable

and can receive cable channel XX (62), you can receive the BRATS ATV repeater; both are on 439.25 MHz. The W3WCQ BRATS ATV Repeater System has inputs on 426.25 and 1223.25 with outputs on 439.25 and 911.25. Please join us. If you have any technical questions, check into The BRATS Answer Men on 63.03 (or 220, 440 inputs) and ask Answer Men W3WVV and W3WCQ, or catch them on the repeater at any time. They'll be happy to help you with ATV, or with any facet of Amateur Radio.

Mayer - W3GXK

Ole Virginia Hams Amateur Radio Club

Meetings: Third Monday of each month, 8:00 p.m., Northern Virginia Coop Building

10323 Lomond Drive, Manassas, Virginia

Repeaters: Voice: WA4FPM 146.97 and 224.66

Digipeater WA4FPM-1 145.09 Digipeater WA4FPM-3 223.40

Net: Each Thursday, 8:00 p.m., 146.97 and 224.66 Information: Harry Vorhauer - W4PVA 703-368-6050

Steve Frick - N4OGR 703-361-0008 or Metro 690-6547

Mail Address: Ole Virginia Hams ARC, PO Box 1255, Manassas, VA 22110

The Ole Virginia Hams Amateur Radio Club held its annual election of officers during the February meeting with the following results:

President Joe Tutino, AB4QV

Vice-President Harry Vorhauer, W4PVA

Secretary Ken Moan, KM4UH Treasurer Steve Frick, N4OGR

The guest speaker for the February meeting was John Kanode, N4MM. John talked about his recent trip to the ARRL meeting. Subjects discussed included the pending no-code NPRM, the Bouvet Island DXpedition and it's possible ramifications, the still pending actions on 220 MHz band, and the increase in the yearly ARRL dues.

The guest speaker for the March meeting was Dick Daniels, W4PUJ. Dick has been with AMSAT for a number years. He gave a most interesting talk on the history of Amateur Radio satellites, accompanied by a number of very interesting slides. The slides included pictures of Amateur Radio satellites from the first one through the latest, and including some foreign satellites built in Japan, Russia and Europe.

Mike - N4REI

Department of State ARC

Meetings: First working Monday of each month at 1200 Noon.

Main State Department Bldg, Room 3524, Washington, DC

The Foreign Service Net: Every Sunday, 1500-1530Z on 14.316

1530-1600Z on 21.416 and 1600-1630Z on 28.416

Repeater: W3DOS/R 145.19, open access. Round Table, Thursday nights at 8:30

A new Packet Radio Station has been established for W3DOS. KK4XO, who is soon departing overseas to become 9Q5XO has installed a Kantronics KPC-2 TNC, ICOM IC-4A handie talkie, small UHF Amp, VHF-UHF Duplexer and power supply in the Club Station.

The station includes a Kanode/Mailbox KM features and operates on 446.075 MHz. It may be accessed through the DCA 3 network node. W3DOS-1 mailbox

(approx 16K avail). W3DOS-3 = KANODE (3 available). The packet station shares the same antenna as the W3DOS VHF repeater. The Club purchased and installed a DX-500 Dualband base antenna to replace the old repeater antenna which was damaged in a storm late last year.

The ARES group will be utilizing the VHF repeater during the Cherry Blossom parade to be held April 8th.

Janie - KG3R

THE U.S. DEPARTMENT OF STATE AMATEUR RADIO CLUB, W3DOS

Will have its annual Foreign Service Banquet at the Ft Meyer Officers' Club Wednesday evening, May 23rd Social hour will begin at 1830, dining at 1930

The evening's speaker will be
Paul Van Der Eijk, KK4HD
from the World Bank
His topic will be
The World Bank and Ham Radio, 4U1WB

Advance reservations are necessary - Contact: Bill Harrison, KK4XO at 647-9384 (Days) Janie Dorset, KG3R at 525-1488 (Evenings)

Columbia Amateur Radio Association

Meetings: Fourth Tuesday of each month, @ 7:30 p.m.

Howard County Emergency Operations Center (EOC),

Howard Building, Ellicott City MD.

Repeaters: 147.735/147.135 Mhz, - General Conversation

147.990/147.390 Mhz, - Open Autopatch

222.340/223.940 Mhz, - Crosslinked to 147.135 Mhz

Packet: TCP/IP connections VIA the Howard County EOC on 145.55 Mhz.

Mail may be addressed to CARA @ NB3P on 145.09 Mhz.

Nets: ARES, 1st. & 3rd. Tuesdays, @ 7:30 p.m.

CARA, Tuesdays (except meetings nights), @ 8:30 p.m. (All Nets Meet on 147.135 Mhz, unless otherwise posted.)

Mailing: CARA, P.O. Box 911, Columbia, Maryland 21044

Information: CARA Hotline - (301) 997-5052

In trying to keep the Amateur Radio community informed on ham activities occurring in Howard County, we plan to publish this report monthly. If you have any information about Howard County Amateur Radio activities or the Columbia Amateur Radio Association (CARA), please contact Bill Machia - N3HTJ at (301) 997-3251. Suggestions and additions are appreciated.

On Sunday April 7, CARA sponsored a rebroadcast of the Communicators licensing forum from California. The rebroadcast was transmitted on the 147.39 repeater. Special thanks go to Don-W4VQA, Sherry - N8COW and all others who helped make this rebroadcast possible. CARA hopes to use this repeater for similar activities in the future. If you have any suggestions, please contact Ivan - K4IML.

Howard County RACES/ARES has scheduled events for the 8th, 20th, and the 26th through the 28th of May. On the 8th of May, RACES will participate with the Howard County Fire Department in the regular monthly RACES exercise. During this exercise, RACES members will simulate fire dispatch and emergency communications throughout the county. On May 20th, RACES/ARES members will provide communications for the Columbia Triathlon. To conclude the month, RACES/ARES will provide communications for the Soccer Tournament of Champions from May 26th to the 28th.

Howard County RACES/ARES needs volunteers, if you wish to participate in any of these activities, please call Mike Carr - WA1QAA at (301) 799-0403.

The CARA Hamfest committee held its monthly meeting on March 20, 1990. This year's Hamfest is scheduled for October 14, 1990. Please keep your calendars open. As time approaches we will be needing volunteers for many operations and activities. The general admission price will be \$5.00, with tailgating prices of \$10.00 per spot and tables at \$20.00 each. Both the tailgating and table prices include one admission. Contact Cam Whetstone - WA3YOH for information and reservations. Cam can be

Contact Cam Whetstone - WA3YOH for information and reservations. Cam can be reached at (301) 486-2609 or 765-7918. For updated information on the CARA Hamfest call the CARA Hamfest Hotline at (301) 997-5052.

May 19, 1990 is the scheduled date for this year's CARA picnic. The club will provide beer, wine and soda. Please bring a side dish, main dish or dessert and your serving utensils. If you plan to attend or have questions, contact Sherry - N8COW.

May 22 is the next scheduled club meeting. Ivan - K4IML will speak on the aspects of fiber optic communications. This meeting will be held at the EOC in the Howard Building, Ellicott City, MD. See you at the meeting.

Bill - N3HTJ

Metropolitan Communications Network

Meetings: Quarterly, on the second Sunday of the month.

Time and place to be announced.

Repeater: N3AGB/R, 52.250 MHz in; 53.250 MHz out.

On-the-air: * Saturdays at 20:00 hours EDST.

Mailing: Bob Sporn - WA3GGO, 9927 Cottrell Tr, Silver Spring, MD 20903

Information: Bob Sporn - WA3GGO (301) 434-1719

It is with great sorrow that we have to report the passing of our President, Rufus (Rudy) Williams - W3UBZ on March 7th (See details under Silent Keys, page 31)

The June meeting will be held Sunday June 10 at 2:00 p.m. at the QTH of Frank Hipsley - WA3ZAR, now President. At that meeting a Vice-President will be elected to complete the former Vice-President's term.

At the September meeting, it was voted to have the Saturday night net meet at 20:00 hours Eastern Daylight Saving Time from April to October.

Charley Doehne - W3KZH, who frequently checked in on our nets, has had a stroke. He has been in and out of the hospital several times and is now recovering at a rest home in Laurel.

It was learned that Peter Lassovszky - WB3KQM, of McLean, Virginia and a newcomer to our Saturday Night Net, is also a pilot - sharing the interest of Marv Storey - N3FBO in aviation.

THE SUNDAY MORNING COFFEE NET on 50.4 MHZ AT 9:00 Hours

Sunday, March 25th, we were pleasantly surprised to have Harry Blutstein - W3AY and Stanley Brigham - W3TFA join us. Stan has been very active in QRP and is trying to earn WAS on 10 through 80 meters.

THE MARYLAND FREE STATE SIX METER SIDEBAND NET (50.125 MHz) at 19:00 Hours

This net has been reactivated and is now functioning.

Bob - WA3GGO

The Intrepid Crew at Metropolitan Communications



Standing: L-R Sitting

N3FGO, KA3TJI, WA3GGO;, K3WVR, KA3TQA WA3ZAR KA3LJR, WB3EPX, WA3UEA

Fauquier Amateur Radio Club

Second Tuesday of each month, 7:30 p.m. Meetings:

Shadow Lawn Center, Warrenton, Virginia

147.165 Voice, 145.070 Packet Repeaters:

Each Wednesday, 9:00 p.m., 147.165 Net: Information: Bob Taylor, KC4CVG. (703) 439-2786 (H)

(703) 642-6070 (Work)

Route 1, Box 445, Amissville, Virginia 22002 Mail Address:

The Fauquier Amateur Radio Club March meeting was held at the Shadow Lawn Center in Warrenton, Virginia. Don Maziarz - WB2WVG, who is an active radio DX chaser and Fauquier Amateur Radio Club member, provided an interesting slide narration on the ways and means of making the DXCC honor roll. Don discussed the methods used by the top DX operators as well as his own experiences. Topics covered included DX operating procedures, station equipment, antennas, QSL card exchanges, twenty most sought after countries, etc. The presentation was followed by a question and answer session.

The club's Volunteer Examiner Team, managed by Frank Ross - W4NHJ, will conduct a license exam session at Vint Hill Farms Station, Virginia, at 7:00 p.m. on the 18th of April. The spring radio theory training classes will be completed and classes will resume the third week in September.

Planning is currently underway for the ARRL sponsored Field Day activities to be held in June. The club plans to return to Vint Hill Farms Station for the weekend of operating under simulated emergency conditions.

Bill Mills - KC5PF

Shenandoah Valley Amateur Radio Club

First and third Fridays of each month at the SVARC clubhouse Meetings:

on Grace Street in Winchester, VA. 146.22 in 146.82 out 7:15 each night

Repeater: P.O. Box 139, Winchester, VA 22601 Club Address:

The meeting of March 2 was devoted to a program on Search and Rescue dog teams. Ms. Providence LoPresti of the Blue and Gray Search and Rescue Dog Teams along with a friend and her dog were our guest speakers. Ms. LoPresti had with her three of her search dogs, Merlin, Bandit, and Brumbi. We viewed slides on how a search dog is trained and of Ms. LoPresti's trips to Leninanken, Armenia; Mexico, and Hurricane Hugo.

Her dogs are Australian cattle dogs and they stole the show. They are beautiful animals. We were told that it takes at least a year to train a search dog

before it can be certified for use in locating earthquake victims, lost children, hikers, hunters, and drowning victims.

Ira Lavitz - WD4JSN is in the medical center and responding to treatment. He is hoping to be out of there in a few days.

My spies tell me that we are going to have a wedding of two club members this month!

I was delighted to see Lloyd Penrose ("Pen") - NC8G with us at a recent QCWA meeting. We all hope you continue to improve, Pen.

Walt - WA4HVU

Rock Creek Amateur Radio Assn.

Two Meter Net: RCARA Alumni Net: RCARA LUNCHEON:

Meetings: Vitro Labs Mailing Address: FM 144.65/145.25 Mondays 8:00 p.m.

7.23 MHz, Mondays 11:00 a.m.

Wednesdays, 11:15 a.m., Anchor Inn, Wheaton, MD

7:30 p.m. the third Friday of each month at

P.O. Box 1913, Silver Spring, MD 20902

Steve Posner - KP4FF, an employee of the Public Health Service, but speaking in his capacity as an Amateur Radio operator, addressed the Club's February meeting. He explained how trained radio operators are able to perform a dual role as medically trained personnel and communications personnel while part of a Disaster Medical Assistance team.

Steve did this by relating his experiences as a member of a DMAT serving Russian citizens victimized when their countryside was ravished by a gas pipeline explosion; and of similar experiences for a DMAT serving during the aftermath of Hurricane Hugo. (The April QST pictures equipment that is representative of a type used by the Public Health Service.)

Please read the article by Garry Chadwick - KD3IQ and Thomas Vegella - K1FEX on page 13 of the April issue of Auto-Call for a detailed explanation of how Amateur Radio operators, such as Steve, are preparing for their potential performance wherever a need exists.

According to Boyd Nelson - KZ3Z, 19 applicants for licenses appeared on March 11 at Columbia Union College. 38 elements were administered, resulting in a passing grade for 37% of these individual elements, and an overall score of 6 new or upgraded licensees. For future upgrading: Bernie Pettit - WB9BZL graduated 4 Novices and Bill Ruth - W3HRD has graduated 3 Novices, so far.

Tom Smith - W3LOV and his wife, Bertha, are now permanent residents of Delaware. You may correspond through 39 E. Stone Run, Selbyville, Delaware, 19975. Tom's move represents an opportunity for QSL card seekers for LF contacts with an elusive state! The Wednesday lunch bunch will miss Bertha and Tom, but we hope that both will keep in touch.

Granville Klink - W3AFV, "the grand old man of the ether waves" expounded on the broadcast receivers of the 1920s at the March club meeting. He described the solid state crystal receivers available years before Bordeen and Brattain invented the transistor in 1948. (The catwhisker was included as a no-charge option.)

Wireless Specialty was an early supplier of crystal detectors, receivers, and headphones in an industry plagued by patent suits inhibiting both technical progress and manufacturing.

However, progress ensued and the crystal detector was replaced with a triode vacuum tube that could be used in a regenerative detector circuit and resulted in better signal sensitivity and a higher audio output.

The final step was to increase the sensitivity and sharpen the selectivity through the use of RF amplifiers with tuned circuits, using triodes and Hazeltine's Neutrodyne circuit to prevent oscillation due to the triodes interelectrode capacitance. This combination was known as a TRF or tuned radio frequency set that became the standard of the industry until the advent of the superhet.

In June, Rock Creek ARA will hold its annual Field Day program at the Izaak Walton League Park off Snouffer School Road in Gaithersburg. All area Amateur operators are welcome to participate.

Bob - KD3IO

Sterling Park Amateur Radio Club

Meetings: Third Monday of the month except December, July and August

At Sterling Community Center Annex, Church Road (Rt. 625)

near Route 28, Sterling, Virginia

Net: Monday nights (except meeting nights), 8:00 p.m. on 28.320 MHz.

Mailing: Box 599, Sterling, VA 22170

Information: Jim Kenney, KJ4KW (703) 444-2632 or

Joe D'Angelo, WB2SAI (703) 444-1252

It has been years since the activities of the Sterling Park Amateur Radio Club have been documented in Auto-Call. Hopefully, this will inaugurate a new era of communication with the ham world.

By the time this is published, Chris Hushak - WA1ZXX will have completed his Novice class, with help from Forrest Snyder, N4UTY. Interest and attendance have remained high, so we should be able to announce a new group of hams in the near future.

We have reinstated our weekly SPARC ten-meter net, on 28.320 at 8:00 p.m. Monday nights, except for meeting nights.

It has proven to be popular in the Sterling-Herndon-Reston area, since most everyone can find some way to get out on 10 despite local subdivision antenna restrictions.

Featured speaker at our March meeting was Barbara NcNaught, a meteorologist with the National Weather Service. She gave an interesting presentation on Operation SKYWARN. It generated a lot of interest, both for direct participation in the program, and also for spreading information about the program.

Dick, W4LMJ

Laurel Amateur Radio Club

A Volunteer Examiner Coordinator

Meetings: 4th Wednesday of each month, 8:00 p.m. at Capitol College

on Springfield Road, Laurel.

Social: 2nd Wednesday of each month except December.

Nets: 1st & 3rd (5th) Wednesday of each month, 8:30 p.m. on 147.54

Mail: P.O. Box 3039, Laurel, MD 20709-0039

Exams: 4th Saturday of each month, 10:00 a.m. at Maryland Radio Center. Information: John - W3GFS (301) 490-5286 or Frank - K3LDE (301) 498-2213

The March meeting featured a program on packet radio, given by George - N3GPR and John - WB3GXW. George started with the basics of communication and ended up with the speed and efficiency of packet radio. John then gave a demonstration of how to use packet. Everyone enjoyed the program, which was designed as a "primer" for packeteers. Even us old hold-out said it may be "A" mode for the future!

The LARC continues its monthly testing at Maryland Radio Center, and this writer (not an Extra), finally volunteered to lend a hand. What an experience. Not from the testing point of view it was as efficient and orderly as could be, given the circumstances. However, it was disconcerting to have to try to do paperwork and converse with applicants.

(Continued

AUTO-CALL 50 May 1990

Stafford Area Repeater Association

Meetings: Weekly, 0730 a.m. every Saturday morning. at the

"Nothin Fancy" Cafe on Route 1. All meetings are informal.

Repeater: N4SMP/R 145.27 out 144.67 in. Autopatch for members.

Mailing: c/o George Gautney - N4SMP, 9 Skyview Court, Stafford, VA 22554-5232

Information: Dick Kirby - W4GFB (703) 720-0406 or George Gautney - N4SMP (703) 659-5720

Packet: 145.07, W4GFB-2

SARA participation in the Special Olympics 16 and 17 March was a great Organized by N4LZJ, advisor to the North Stafford High School Radio Club, SARA's turnout included AA4PB. N4PVC. WD4FOJ, W5ZUA, WAØTSO, N4XVL, N4YJS, KC4OGY, W4GFB, WA4MCD, WA4FQF, NS4LZJ, and N8VOR. We're told that some of these operators - who will remain unidentified - experienced a near catastrophe when the high winds took down their VHF antenna. Three of the operators - N4XVL, N4YJS, KC4OGY are recently licensed hams from the North Stafford High School. All three are already Technicians.

WD4FOJ, known locally as "Frozen Orange Juice" has a new ICOM 725 in his shack and has been working diligently on his "chicken-wire" dipole antenna. You'll have to visit him to find out what

his antenna really looks like!

N4LSP is about to pick up some of the slack in the packet cluster to the South and he says you will shortly be able to bring up his node just by connecting to

DUCKDX. If you know him, you'll understand why "DUCK" is so appropo.

We now have two radio clubs in the Stafford area - one at North Stafford High, under the direction of N4LZJ, and the other at Rock Hill Elementary School under the watchful eye of Jerry Mullinex who recently passed his Novice, Technician and General exams at one sitting and is now waiting for his callsign. Both clubs need gear and can use nearly anything you can afford to donate. If you have anything, just contact anyone in SARA or in the Pentagon Amateur Radio Club and we'll get you in touch with the right people. Incidentally, membership is free for any student with a license.

Our Saturday morning breakfast meetings are open to anyone who gets up in time. The morning is as informal and free-wheeling as you can get and the order of the day is tall ham tales and a good breakfast. Just drop in anytime before about 0930 Saturday morning at the "Nothing Fancy" Cafe, South of Exit 47 on the East side of Route 1.

Spike, K9MX

Laurel Amateur Radio Club - Continued

LARC thanks those who were patient, who accepted the results of their testing (pass or fail), and who we know will be back next month to continue the upgrade process. Congratulations to all who make this monthly testing the best session in the area!

Finally, congratulations to Donna, who upgraded to technician and is now

N3HYF; also to Ken, who became KX3F; to Eric - N3GPH, who is now an Eagle Scout; and to Pud - W3DQI, elected director for the MEPN.

For information on local club events, give a call to John or Frank (listed above) give a shout on the club frequency of 147.54 any night after 9:00 p.m.

Pud - W3DQI

Pentagon Amateur Radio Club

Meetings Monthly, on the second Wednesday of the month. Noon.

PARC clubroom (5B272), The Pentagon

Repeater: K4AF/R, 444.55 MHz. CTCSS 88.5 sometimes in effect.

Mailing: P.O. Box 47063, Washington, DC 20050

Information: David G. Boyd - K9MX (202) 695-2020 or 703-659-6241 or William Klein - N4VBW (202) 693-3358 or (703) 590-2546

Bob Bonn, who is awaiting the arrival of his new Technician license, has prepared with a vengeance for the arrival of that ticket. First, he bought himself a complete Yaesu FT-101ZD station (with external VFO and lots of other goodies) and then — at Timonium — committed himself to a license upgrade by buying himself a Yaesu FL-2100B linear. Now, if he can just get an antenna up . . .

Upgrade fever continues at the Pentagon. Don Darby - KA3VNE now has credit for the General written, Steve Pate - N4YFH is now an Advanced, Ron McCallum has moved up to Technician.

If you haven't marked Armed Forces Day - 19 May - on your calendar, you should. Pentagon club members are welcome to the station that day to help in the special events operator duties, and everybody else is invited to make a call and earn a Pentagon QSL and certificate. Details were in the April issue of Auto-Call. (p 41)

We now have the packet station connected to a dumb terminal, which means we have nearly instant on and an 80 column display. Dick Williams - WE6H got it all hooked up after an unknown benefactor got the terminal fixed. The new station goes well with the spiffy look of the club-house now that Bob Bonn, the new club librarian, has also decided to function as station janitor. But heaven help you if he catches you making or leaving a mess!

Field Day is fast approaching and we'll need all the operators we can find. Contact Bill Klein to offer your services in any critical function - operator, band captain, cook. . .

See you at Lunga Reservoir!

Spike - K9MX





Arlington Amateur Radio Club

Meetings:

Third Tuesday of each month, 7:30 p.m., at the American Red Cross,

Arlington Chapter, 4333 Arlington Blvd. (Rte. 50).

Net: Info: Tuesdays (except meeting nights) 7:30 p.m., 144.87/145.47 MHz FM.

Craig Church, N4EFJ (703) 979-8325.

March Meeting

At the March 20 meeting of the Arlington Radio Club, a standing-room-only assemblage learned about the Club education program, discussed present and future ham activities, and enjoyed the classically humorous tech talk by the incomparable Ed Presley - KC3SV.

Fred - WD4DHW reported the successful inauguration of the Arlington Novice Classes. "We've got a good mix of students," Fred declared, "and all eighteen students seem quite enthusiastic about becoming hams." Class members range in age from ten to over sixty years. The classes, taught by Fred and Terry - K9ELP, will run for ten weeks.

Jim - KM4XG asked all members to look for possible locations for the VE-administered examinations to be held in mid-summer. "We need a place with at least three rooms, located in Arlington County, and accessible by Metro." [Bo Pierce - N4VEC has offered use of office space in Ballston.]

Craig - N4EFJ informed the membership that efforts to improve the club station - W4WVP are progressing well. Candidate sites for the proposed fifty-foot tower at the Red Cross Building have been selected, and most of the remaining red tape has been cut through. However, an interesting problem has arisen. Apparently, when W4WVP is on the air, RF sometimes triggers the Red Cross alarm system. The manufacturer of the malfunctioning security system has been contacted, and the problem will hopefully be alleviated soon. Everyone, Craig noted, is encouraged to use W4WVP, which has, inter alia, an ICOM IC-720A HF transceiver and a Yaesu two-meter all-mode transceiver.

The club then offered hearty congratulations to Tom - N4BYF, Tom - W4LMW, Robert - KC4ONW/KT, Jerry - N4GA and Harry - N4CWP for their outstanding entrepreneurial effort on behalf of the club at the February 25 Vienna WinterFest. The group amassed approximately \$600 for the club by horse-trading equipment donated to the club by the estate of former member Steve Wallace, WA4PLE. Nice job, guys.

Craig - N4EFJ announced that the Arlington ARC will sponsor a transmitter hunt -- a.k.a. fox hunt -- to be held May 5 (see below).

Treasurer George - KA4PPM reported that the club had 73 paid-up members and a balance of \$1,336.15. The club allocated \$30 to purchase QSL cards for W4WVP. Tom - N4BYF will head the team of members making the selection.

The festivities at the meeting culminated with an unforgettable presentation by Ed Presley - KC3SV on constructing two-meter beams from sheet metal. Although the antennas did not perform exactly as they should have, everyone had a great time and learned a lot about antennas. The meeting then adjourned to a local watering hole for ham fellowship.

Public Service

During March, members of the Arlington Amateur Radio Club took part in a number of important community service events. On March 10, five members--including Craig - N4EFJ, Tom - N4BYF, Rich - KA4GFY, Rick - N4ASX, and Harry - N4CWP--provided communications at the St. Patrick's Day Parade in Alexandria. Ed - N3HFT had the best seat of all, riding in the parade aboard the WWRC Talk Van.

(Continued on page 54)

ARRL National Convention

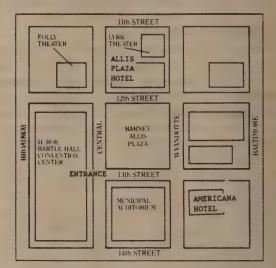
Kansas City - June 8-10

EVERYTHING IS UP TO DATE IN KANSAS CITY FOR THE 1990 ARRL NATIONAL CONVENTION AT BARTLE HALL JUNE 8-10

The 1990 ARRL National Convention will be held in Kansas City, Missouri, June 8-10th. Location is Bartle Hall in the Kansas City Convention Center, 13th and Central, Exit US I-35 and Broadway.

Move in: Commercial 10-8 Friday, Swappers 2-8 Friday. Both may drive in and unload on Friday only, Saturday dock is available to unload. No vehicles in Convention Center till closing on Sunday. 200 Commercial Booths and over 500 swap tables (2 1/2' by 8') are available.

Open hours 9-5:30 on Saturday and 9-4 on Sunday. Information and Hospitality Room open 1-8 on Friday, 7-6 on Saturday and 8-3 on Sunday. Talk-in 146.34/94 Repeater. Emergency phone number for Friday, Saturday and Sunday only is 816-591-8756.



Arlington Amateur Radio Club - Continued

Two weeks later, the Club took part in an Arlington Red Cross practice drill. Robert - KC4ONW/KT, Dan - N4QOS, Terry - K9ELP, Joe - WA4FXN, and Craig - KB9BJH assisted in this important operation, along with those who helped at the St. Patrick's Day parade.

It was no practice drill one week later when Craig - N4EFJ keyed the 145.47 repeater, seeking communications support for Red Cross relief efforts at a collapsed six-story apartment building in Arlington. Joe - WA4FXN and Robert - KC4ONW/KT responded immediately. For the next four hours, the trio provided communications for the relief effort. Red Cross officials offered their thanks to the group for a job well done.

May Meeting

Planning for Field Day will be the

focus of the next meeting on May 15. Come early to socialize and enjoy refreshments, starting 7 p.m.

Adams County Amateur Radio Society Gettysburg, Pennsylvania

Meetings: 1st Monday of the month (except for March, June, Sept, and December)

7:30 p.m. at the Emergency Operations Center, Adams County Courthouse, Gettysburg, PA

Quarterly dinner meetings, 1st Tuesday of March, June, Sept., Dec.

At the Gettysburg Bonanza Restaurant.

Repeater:

145.35 out

Nets:

RACES 2-meter - Tuesdays, 7:30 p.m. PA RACES - 3993.5 kHz - Sundays, 8:30 a.m. HF Net - 7.278 MHz - Thursdays 6:00 - 8:00 p.m.

Mailing:

34 York Street, Gettysburg, PA 17325 Information: Walt Lane - W3KGN (717) 334-5513 or Bob Lauder - WB3DEX (717) 642-6259

The Adams County Amateur Radio Society (ACARS), was founded in 1957. ACARS members are a part of the Adams County Emergency Management Agency (ACEMA). Adams County has been designated as a primary evacuation center in the event of any future nuclear accidents at Three Mile Island.

Periodic drills are held in conjunction with the Federal Emergency Management Agency (FEMA). The County Emergency Management Agency provided and maina complete Amateur station, including a 2-meter repeater, located in the EOC, for use by ACARS members. The Director of the County EMA is Richard Ketterman - KA3MGU

At the March 6 dinner meeting, Mike Poore - N3BIA gave an informative talk entitled "Amateur Radio, is it Hazardous to Your Health?" Mike gave several suggestions as to how we can protect ourselves from electronic radiation.

Plans are underway (details will appear in a future issue of QST), for a Special Event Station in conjunction with the celebration of General Eisenhower's 100th birthday in October.

David Arendt - KA3VEI, our newest licensed member, has made arrangements to show the ACARS copy of the ARRL video "The World of Amateur Radio" to science classes at the Gettysburg High School.

ACARS member Randy Shriver -KG3N made three two-way contacts with the Space Shuttle in August Randy is now preparing to make contacts with the STS 35 Columbia when it is launched this year. Anyone interested in SAREX (Shuttle Amateur Radio Experiment) of 1990 is asked to contact Randy (209 South Street, Hanover, PA 17331). The modes of communication will be twoway voice, packet, fast and slow scan TV.

Bob - WB3DEX



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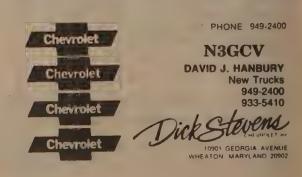
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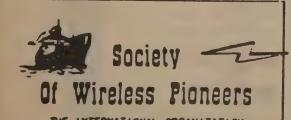
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T1- 1111- NO.
Temple Hills, MD (05)

FOR SALE: TenTec CORSAIRE-I Model 560 with power supply, Model 280. Excellent condition, factory test and alignment February 1990. Includes 8-pole IF filter and 2.4 and 1.8 MHz filters - \$750 with power supply. Jack Geist - N3BEK, (301) 942-5949. (05)



FOR SALE/TRADE: Two "Entrepreneur Institute" computer courses "Computer Consulting" and "How To Make Money in Microcomputers." I planned to use them for retirement business but changed my mind. They cost \$60 each but they're yours for:

a) Putting in a ground rod in my backyard

b) A low pass filter

c) Helping me put in some attic dipoles

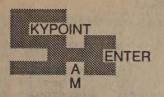
d) Transmatch

d) Transmatch
e) What have you?
Mel - WA3AGP (
Laurel, Maryland (301) 490-3308 (05)



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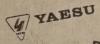












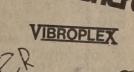








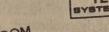


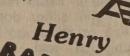


















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SUPER PRICE SPECIAL ON AMPLIFIER STOCK

Henry - B & W - Ameritron

TE Systems Kenwood

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Store hours:

Tues - Thurs) 10AM - 6PM

Fri | Noon - 9PM Sat 1 9AM - 6PM

TNX & 73's N4QAS

AUTO-CALL POLICY

PRODUCTION POLICY

Copy for Auto-Call will be accepted in any form handwritten, typed, compatible computer disk or modem. (We use an IBM AT clone and WordPerfect 5.0 word processing program, Hayes compatible modem - 300 or 1200 baud.) All hard copy is re-typed to preserve uniformity of style in the magazine.

In determining space requirements, figure 80 12-pitch characters per line and 60 lines per page including the space taken up by headings, photographs, etc. Either black-and-white or color photos can be used as long as the contrast is good. Master copy, which is to be reproduced directly, should be in black ink on white paper and should be in proper page ratio. Any copy can be reduced or enlarged as desired.

Columns from Foundation member clubs are eagerly solicited and any items of general Amateur Radio interest are most welcome. The editor does reserve the right to edit or reject any portion of any copy submitted and to make minor changes to make copy fit available space.

SHACK SALES

Deadline for copy is the 5th of the month preceding the publication date. Shack Sales will NOT be accepted over the telephone. Full address must be provided for our reference but need not be published. Each ad must include the call sign or the full name of the advertiser. If the full address in not included in the ad. we prefer to include the city along with a telephone number so that readers will know whether a long-distance charge is involved. The entire telephone number including city and state is counted as only one word. We do not count postal zip codes. Otherwise, each word. abbreviation, model number or group of letter/numbers is counted as one word. Remittance must accompany each ad.

See next column for additional information on advertising. For further information, phone the Auto-Call editor at (703) 536-8469, McLean, VA.

ADVERTISING

SHACK SALES

Non-commercial advertising of Amateur associated equipment is available to subscribers of Auto-Call at a rate of 3¢ per word with a \$1.00 minimum. Commercial vendors and non-subscriber rate is 17¢ per word with a \$5.50 minimum.

Special headings or special spacing may be used (e.g., one item per line) but such ads will be charged at a column inch rate \$1.00 per column inch for non-commercial ads, \$5.50 per inch for commercial vendors and nonsubscribers.

Full name and address must be provided with each ad but need not be published. No ads will be accepted over the telephone. Since no effort is made to investigate advertisers, no warranty can be implied.

DISPLAY ADS

DISPLAY ADS are "boxed" and may contain artwork or photographs. They may be placed along with the Shack Sales or displayed in other sections of the magazine. Requests for specific locations will be honored if practical but cannot be guaranteed.

Display ads are charged according to size and duration of run as shown below. All advertising must be pre-paid for at least the current month.

Rates per Issue

Page Co	linch	l Year	6 Times	3 Times	l Time
Full	18	\$75.00	\$90.00	\$100.00	\$105.00
1/2	9	55.00	65.00	71.00	75.00
1/3	6	40.00	46.00	51.00	54.00
1/4	41/2	33.00	38.00	41.00	43.00
1/6	3	22.00	26.00	28.00	30.00
1/8	21/4	17.00	20.00	22.00	23.00
1/9	2	16.00	19.00	21.00	22.00
1/18	1	8.50	10,00	11.00	11.50
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Extra charges for halftoning photos and for in-house artwork or layout.

the month preceding publication date.
(e.g., Copy for June issue must be received by 5 May)

All Advertising Must be Pre-paid



The American Radio Relay League

Newington, CT. 06111

Atlantic Division Director Hugh Turnbull, W3ABC 6903 Rhode Island Avenue College Park, MD 20740 Phone: (301) 927-1797

Signature _

VISA, MC, AMEX, Discover #_

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MAY 1990

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDA
1	2	3 Antietam PG Wireless	BARC MARC	5 Anne Arunde	6 l Mobileers Shenandoah	7 Stafford EXAMS Richmond College Po
8	9 Adams Coun Dept of Stat	Fauquier	Laurel MADRAS Pentagon - FAR -	12 Mt.Vernon No. VA	13 Alexandria SMARC Vienna	14 Stafford EXAMS Frederick
15	16 PVRC	Antietam Arlington Woodbridge	Goddard MARC QCWA #137	AnneArundel	20 RCARA Shenandoah	21 Stafford
22	23 SPARC	24	25 Laurel MADRAS	26 St.Marys	27 Alexandria New Carrollt Vienna	28 Stafford on EXAMS Laurel
29 MD FM HAI EXAMS	30 AFEST	31		NCDXA Net e	every Sunday, 14	7.420-8:30 p.m.

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